

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 19.3846 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: US-10-650-585-4
Perfect score: 1771
Sequence: 1 MKKKLEHHHHHTSAGITK.....TTMTSSAWRHPQFGKKKK 334

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PTUS_COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1771	100.0	334	4	US-10-017-736C-4
2	1660	93.7	409	4	US-10-017-736C-2
3	1589	89.7	303	4	US-10-017-736C-10
4	1589	89.7	341	4	US-10-017-736C-14
5	1589	89.7	352	4	US-10-017-736C-13
6	1589	89.7	380	4	US-10-017-736C-12
7	1589	89.7	393	4	US-10-017-736C-11
8	1580	89.2	303	4	US-10-017-736C-18
9	1579	89.2	303	4	US-10-017-736C-16
10	1570	88.7	301	4	US-10-017-736C-17
11	1532	86.5	292	4	US-10-017-736C-15
12	1531	86.4	2201	4	US-09-539-601-6
13	1531	86.4	2201	4	US-09-539-601-15
14	1531	86.4	2201	4	US-10-029-907-3
15	1531	86.4	3010	4	US-09-539-601-3
16	1531	86.4	3010	4	US-09-539-601-21
17	1531	86.4	3010	4	US-09-539-601-27
18	1528	86.3	1692	3	US-09-263-933-4
19	1528	86.3	1692	4	US-09-919-901-4
20	1528	86.3	1692	4	US-10-191-966-4
21	1528	86.3	2307	3	US-09-263-933-2
22	1528	86.3	2307	4	US-09-919-901-2
23	1528	86.3	2307	4	US-10-191-966-2
24	1525	86.1	1692	3	US-09-263-933-11
25	1525	86.1	1692	4	US-09-919-901-11
26	1525	86.1	1692	4	US-10-191-966-11
27	1525	86.1	2307	3	US-09-263-933-9
28	1525	86.1	2307	4	US-09-919-901-9
29	1525	86.1	3010	4	US-10-191-966-9
30	1524	86.1	3010	4	US-09-539-601-33
31	1516	85.6	1692	3	US-09-263-933-18
32	1516	85.6	1692	4	US-09-919-901-18
33	1516	85.6	1692	4	US-10-191-966-18
34	1516	85.6	2307	3	US-09-263-933-16
35	1516	85.6	2307	4	US-09-919-901-16
36	1516	85.6	2307	4	US-10-191-966-16
37	1505	85.0	3010	3	US-09-014-416-3
38	1479	83.5	2013	1	US-08-324-977-12
39	1479	83.5	2013	2	US-08-384-616-12
40	1479	83.5	2013	2	US-08-904-686A-12
41	1479	83.5	2013	3	US-09-315-850-12
42	1479	83.5	2201	3	US-08-952-981A-2
43	1479	83.5	2620	1	US-08-324-977-32
44	1479	83.5	2620	2	US-08-384-616-32
45	1479	83.5	2620	2	US-08-904-686A-32

ALIGNMENTS

RESULT 1

US-10-017-736C-4

; Sequence 4, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamare, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 4

; LENGTH: 334

; TYPE: PRT

; ORGANISM: HCV

US-10-017-736C-4

Query Match 100.0%; Score 1771; DB 4; Length 334;

Best Local Similarity 100.0%; Pred. No. 1.9e-168;

Matches 334; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MKKKLEHHHHHTSAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFKLAALGTGTY 60

Db 1 MKKKLEHHHHHTSAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFKLAALGTGTY 60

QY 61 VYDHLTFLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGR 120

Db 61 VYDHLTFLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGR 120

QY 121 EILLGPADNFEQGWRLAPITAYSOQTRGLLCIITSLTGRDNQVGEVQVSTATQS 180

Db 121 EILLGPADNFEQGWRLAPITAYSOQTRGLLCIITSLTGRDNQVGEVQVSTATQS 180

QY 181 FLATCVNGVCWTVFHAGSKTLGAPKGPITQMTYNDQDLVGNQAPPGARSMTPTCTCGSS 240

Db 181 FLATCVNGVCWTVFHAGSKTLGAPKGPITQMTYNDQDLVGNQAPPGARSMTPTCTCGSS 240

QY 241 DLYLTVRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPFLCPSGHAVGIFRAAVCTRG 300

Db 241 DLYLTVRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPFLCPSGHAVGIFRAAVCTRG 300

QY 301 VAKAVDFIPVESMTTMTSSAWRHPQFGKKKK 334

|||||

```
Db      301 VAKAVDFIPVESMETTMRSSAMRHPOFGGKKK 334

RESULT 2
US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match      93.7%; Score 1660; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 3.1e-157;
Matches 315; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 75
DB      95 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 154
QY      76 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 135
DB      155 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 214
QY      136 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFH 195
DB      215 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFH 274
QY      196 GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 255
DB      275 GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 334
QY      256 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
DB      335 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 394
QY      316 TMRSSAMRHPOFGG 330
DB      395 TMRSSAMRHPOFGG 409

RESULT 3
US-10-017-736C-10
; Sequence 10, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-10

Query Match      89.7%; Score 1589; DB 4; Length 341;
Best Local Similarity 100.0%; Pred. No. 3e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 75
DB      39 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 98
QY      76 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 135
DB      99 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 158
QY      136 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFH 195

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-10

Query Match      89.7%; Score 1589; DB 4; Length 303;
Best Local Similarity 100.0%; Pred. No. 2.5e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 75
DB      1 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 60
QY      76 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 135
DB      61 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 120
QY      136 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFH 195
DB      121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFH 180
QY      196 GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 255
DB      181 GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
QY      256 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
DB      241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
QY      316 TMR 318
DB      301 TMR 303

RESULT 4
US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-14

Query Match      89.7%; Score 1589; DB 4; Length 341;
Best Local Similarity 100.0%; Pred. No. 3e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 75
DB      39 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 98
QY      76 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 135
DB      99 LRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARSARRGRELILGPADNFEQGW 158
QY      136 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFH 195
```

Db 159 RLLAPITAYSQOTRGLGCIITSLTGRDKQVEGEVQVSTATOSFLATCVNGVCWTVFH 218.
Qy 196 GAGSKTLAGPKGPIITOMYTNVDQLVQWAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVR 255
Db 219 GAGSKTLAGPKGPIITOMYTNVDQLVQWAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVR 278
Qy 256 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 279 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 338
Qy 316 TMR 318
Db 339 TMR 341

RESULT 5

US-10-017-736C-13

; Sequence 13, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 13

; LENGTH: 352

; TYPE: PRT

; ORGANISM: HCV

; US-10-017-736C-13

Query Match 89.7%; Score 1589; DB 4; Length 352;
Best Local Similarity 100.0%; Pred. No. 3.1e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 75
Db 50 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 109
Qy 76 LRDLAVALPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 110 LRDLAVALPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 169
Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDKQVEGEVQVSTATOSFLATCVNGVCWTVFH 195
Db 170 RLLAPITAYSQOTRGLGCIITSLTGRDKQVEGEVQVSTATOSFLATCVNGVCWTVFH 229
Qy 196 GAGSKTLAGPKGPIITOMYTNVDQLVQWAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVR 255
Db 230 GAGSKTLAGPKGPIITOMYTNVDQLVQWAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVR 289
Qy 256 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 290 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 349
Qy 316 TMR 318
Db 350 TMR 352

RESULT 6

US-10-017-736C-12

; Sequence 12, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-12

Query Match 89.7%; Score 1589; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 3.5e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 75
Db 78 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 137
Qy 76 LRDLAVALPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 138 LRDLAVALPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 197
Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDKQVEGEVQVSTATOSFLATCVNGVCWTVFH 195
Db 198 RLLAPITAYSQOTRGLGCIITSLTGRDKQVEGEVQVSTATOSFLATCVNGVCWTVFH 257
Qy 196 GAGSKTLAGPKGPIITOMYTNVDQLVQWAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVR 255
Db 258 GAGSKTLAGPKGPIITOMYTNVDQLVQWAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVR 317
Qy 256 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 318 RRGDSRGLSPRPVSYLKGSSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 377
Qy 316 TMR 318
Db 378 TMR 380

RESULT 7

US-10-017-736C-11

; Sequence 11, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 11

; LENGTH: 393

; TYPE: PRT

; ORGANISM: HCV

; US-10-017-736C-11

Query Match 89.7%; Score 1589; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 3.6e-150; Indels 0; Gaps 0;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVYDHLTPLQDWAHAG 75
Db |||||
Qy 91 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVYDHLTPLQDWAHAG 150
Db |||||

Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 135
Db |||||

Qy 151 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 210
Db |||||

Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFH 195
Db |||||

Qy 211 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFH 270
Db |||||

Qy 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db |||||

Qy 271 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 330
Db |||||

Qy 256 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
Db |||||

Qy 331 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 390
Db |||||

Qy 316 TMR 318
Db |||||

Qy 391 TMR 393

RESULT 8
US-10-017-736C-18
; Sequence 18, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-18

Query Match 89.2%; Score 1580; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 2e-149;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVYDHLTPLQDWAHAG 75
Db |||||

Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 135
Db |||||

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 120
Db |||||

Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFH 195
Db |||||

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFH 180
Db |||||

Qy 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db |||||

Qy 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db |||||

Qy 256 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
Db |||||

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 300
Db |||||

Qy 316 TMR 318
Db |||||

Qy 301 TMR 303

RESULT 9
US-10-017-736C-16
; Sequence 16, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-16

Query Match 89.2%; Score 1579; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 2.5e-149;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVYDHLTPLQDWAHAG 75
Db |||||

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVYDHLTPLQDWAHAG 60
Db |||||

Qy 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 135
Db |||||

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 120
Db |||||

Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFH 195
Db |||||

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFH 180
Db |||||

Qy 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db |||||

Qy 181 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db |||||

Qy 256 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
Db |||||

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 300
Db |||||

Qy 316 TMR 318
Db |||||

Qy 301 TMR 303

RESULT 10
US-10-017-736C-17
; Sequence 17, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

FILE REFERENCE: 13/082
CURRENT APPLICATION NUMBER: US/10/017,736C
CURRENT FILING DATE: 2001-12-14
PRIOR APPLICATION NUMBER: 60/256,031
PRIOR FILING DATE: 2000-12-15
NUMBER OF SEQ ID NOS: 25
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 17
LENGTH: 301
TYPE: PRT
ORGANISM: HCV
US-10-017-736C-17

Query Match 88.7%; Score 1570; DB 4; Length 301;
Best Local Similarity 99.3%; Pred. No. 1.9e-148;
Matches 301; Conservative 0; Mismatches 0; Indels 2; Gaps 1;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLODWAHAG 75
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLODWAHAG 60
Qy 76 LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGW 135
Db 61 LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGW 120
Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFH 195
Db 121 RL--PITAYSQOTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFH 178
Qy 196 GAGSKTLGPKGPIITMYTNDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db 179 GAGSKTLGPKGPIITMYTNDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 238
Qy 256 RRGDSRGSLLSPRPVSYLKSGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 239 RRGDSRGSLLSPRPVSYLKSGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 298
Qy 316 TMR 318
Db 299 TMR 301

RESULT 11
US-10-017-736C-15
Sequence 15, Application US/10017736C
Patent No. 6815159
GENERAL INFORMATION:
APPLICANT: Thibault, Diane
APPLICANT: Lamarice, Daniel
APPLICANT: Maurice, Roger
APPLICANT: Pilote, Louise
APPLICANT: Pause, Armin
TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
FILE REFERENCE: 13/082
CURRENT APPLICATION NUMBER: US/10/017,736C
CURRENT FILING DATE: 2001-12-14
PRIOR APPLICATION NUMBER: 60/256,031
PRIOR FILING DATE: 2000-12-15
NUMBER OF SEQ ID NOS: 25
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 15
LENGTH: 292
TYPE: PRT
ORGANISM: HCV
US-10-017-736C-15

Query Match 86.5%; Score 1532; DB 4; Length 292;
Best Local Similarity 100.0%; Pred. No. 1.2e-144;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 27 AOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGRLDLAVAVEP 86
Db 1 AOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGRLDLAVAVEP 60

Qy 87 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLAPITAYSQ 146
Db 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLAPITAYSQ 120
Qy 147 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGHGAGSKTLGPK 206
Db 121 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGHGAGSKTLGPK 180
Qy 207 GPITQMTYNDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGRDSRGSLLS 266
Db 181 GPITQMTYNDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGRDSRGSLLS 240
Qy 267 PRPVSYLKSGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 318
Db 241 PRPVSYLKSGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292

RESULT 12
US-09-539-601-6
Sequence 6, Application US/09539601C
Patent No. 6630343
GENERAL INFORMATION:
APPLICANT: Bartenschlager, Ralf FW
TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
FILE REFERENCE: all sequences
CURRENT APPLICATION NUMBER: US/09/539,601C
CURRENT FILING DATE: 2001-08-30
EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
EARLIER FILING DATE: 1999-04-03
NUMBER OF SEQ ID NOS: 51
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 6
LENGTH: 2201
TYPE: PRT
ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match 86.4%; Score 1531; DB 4; Length 2201;
Best Local Similarity 94.7%; Pred. No. 2.7e-143;
Matches 288; Conservative 9; Mismatches 7; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLODWAHAG 75
Db 95 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLODWAHAG 154
Qy 76 LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGW 135
Db 155 LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGW 214
Qy 136 RLLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFH 195
Db 215 RLLAPITAYSQOTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFH 274
Qy 196 GAGSKTLGPKGPIITMYTNDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db 275 GAGSKTLGPKGPIITMYTNDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334
Qy 256 RRGDSRGSLLSPRPVSYLKSGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 335 RRGDSRGSLLSPRPVSYLKSGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 394
Qy 316 TMR 319
Db 395 TMR 398

RESULT 13
US-09-539-601-15
Sequence 15, Application US/09539601C
Patent No. 6630343
GENERAL INFORMATION:
APPLICANT: Bartenschlager, Ralf FW

```

; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match      86.4%; Score 1531; DB 4; Length 2201;
Best Local Similarity 94.7%; Pred. No. 2.7e-143;
Matches 288; Conservative 9; Mismatches 7; Indels 0; Gaps 0;

QY 16 AGITKVPYFVRAQGLIRACMLVRKAAGHYQMAFMKLAALTGYYVYDHLTPLODWAHAG 75
Db 95 AGITKVPYFVRAHGLIRACMLVRKVAGHYQMALMKLAALTGYYVYDHLTPLRDWAHAG 154
QY 76 LRDLAVAVEPVIISDMVEVKLIITWCAADTAACGDIISGLPVSARRGREILLGPADNFEQCGW 135
Db 155 LRDLAVAVEPVIISDMETKVIITWGAADTAACGDIILGLPVSARRGREIHLGPADSLLEGQGW 214
QY 136 RLLAPITAYSQQTRGLLGCIIITSLTGDRKNQVEGEVQWSTATQSFLLATCNGVCWTVPFH 195
Db 215 RLLAPITAYSQQTRGLLGCIIITSLTGDRKNQVEGEVQWSTATQSFLLATCNGVCWTVPYH 274
QY 196 GAGSKTLTAGPKGPITQMYTNVDQDLGWQAPPGARSMTPCTCGSSDLYLVTRHADVIPVR 255
Db 275 GAGSKTLTAGPKGPITQMYTNVDQDLGWQAPPGARSLTPTCTCGSSDLYLVTRHADVIPVR 334
QY 256 RRGDSRGSLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
Db 335 RRGDSRGSLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 394
QY 316 TMRT 319
Db 395 TMRS 398

RESULT 14
US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match      86.4%; Score 1531; DB 4; Length 2201;
Best Local Similarity 94.7%; Pred. No. 2.7e-143;

```

Db 1204 TMRS 1207

Search completed: May 26, 2005, 22:03:37
Job time : 21.3846 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 58.1537 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-4
Perfect score: 1771
Sequence: 1 MKKKLEHHHHHTSAGITK.....TTMTSSAWRHPPGGKKKK 334

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

- Database : Published Applications AA:*
- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
 - 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
 - 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
 - 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
 - 5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
 - 6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
 - 7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
 - 8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
 - 9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
 - 10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
 - 11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
 - 12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
 - 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
 - 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
 - 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
 - 16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
 - 17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
 - 18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
 - 19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
 - 20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1771	100.0	334	13	US-10-017-736-4 Sequence 4, Appli
2	1771	100.0	334	15	US-10-650-585-4 Sequence 4, Appli
3	1660	93.7	409	13	US-10-017-736-2 Sequence 2, Appli
4	1660	93.7	409	15	US-10-650-585-2 Sequence 2, Appli
5	1589	89.7	303	13	US-10-017-736-10 Sequence 10, Appli
6	1589	89.7	303	15	US-10-650-585-10 Sequence 10, Appli
7	1589	89.7	341	13	US-10-017-736-14 Sequence 14, Appli
8	1589	89.7	341	15	US-10-650-585-14 Sequence 14, Appli
9	1589	89.7	352	13	US-10-017-736-13 Sequence 13, Appli
10	1589	89.7	352	15	US-10-650-585-13 Sequence 13, Appli
11	1589	89.7	380	13	US-10-017-736-12 Sequence 12, Appli
12	1589	89.7	380	15	US-10-650-585-12 Sequence 12, Appli
13	1589	89.7	393	13	US-10-017-736-11 Sequence 11, Appli

14	1589	89.7	393	15	US-10-650-585-11	Sequence 11, Appli
15	1580	89.2	303	13	US-10-017-736-18	Sequence 18, Appli
16	1580	89.2	303	15	US-10-650-585-18	Sequence 18, Appli
17	1579	89.2	303	13	US-10-017-736-16	Sequence 16, Appli
18	1579	89.2	303	15	US-10-650-585-16	Sequence 16, Appli
19	1570	88.7	301	13	US-10-017-736-17	Sequence 17, Appli
20	1570	88.7	301	15	US-10-650-585-17	Sequence 17, Appli
21	1532	86.5	292	13	US-10-017-736-15	Sequence 15, Appli
22	1532	86.5	292	15	US-10-650-585-15	Sequence 15, Appli
23	1531	86.4	2201	13	US-10-029-907-3	Sequence 3, Appli
24	1531	86.4	2201	14	US-10-309-561-3	Sequence 3, Appli
25	1531	86.4	2201	16	US-10-789-355-3	Sequence 3, Appli
26	1531	86.4	3010	15	US-10-467-000-1	Sequence 1, Appli
27	1531	86.4	3010	16	US-10-333-449A-34	Sequence 34, Appli
28	1528	86.3	1692	10	US-09-919-901-4	Sequence 4, Appli
29	1528	86.3	1692	14	US-10-191-966-4	Sequence 4, Appli
30	1528	86.3	2307	10	US-09-919-901-2	Sequence 2, Appli
31	1528	86.3	2307	14	US-10-191-966-2	Sequence 2, Appli
32	1525	86.1	1692	10	US-09-919-901-11	Sequence 11, Appli
33	1525	86.1	1692	14	US-10-191-966-11	Sequence 11, Appli
34	1525	86.1	2307	10	US-09-919-901-9	Sequence 9, Appli
35	1525	86.1	2307	14	US-10-191-966-9	Sequence 9, Appli
36	1516	85.6	1692	10	US-09-919-901-18	Sequence 18, Appli
37	1516	85.6	1692	14	US-10-191-966-18	Sequence 18, Appli
38	1516	85.6	2307	10	US-09-919-901-16	Sequence 16, Appli
39	1516	85.6	2307	14	US-10-191-966-16	Sequence 16, Appli
40	1479	83.5	2201	13	US-10-085-476-2	Sequence 2, Appli
41	1406	79.4	3011	9	US-09-742-659-4	Sequence 4, Appli
42	1406	79.4	3011	10	US-09-891-894-3	Sequence 3, Appli
43	1406	79.4	3011	14	US-10-184-150-3	Sequence 3, Appli
44	1406	79.4	3011	15	US-10-328-997-3	Sequence 3, Appli
45	1406	79.4	3012	9	US-09-238-076-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-10-017-736-4
; Sequence 4, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-4

Query Match	100.0%;	Score 1771;	DB 13;	Length 334;
Best Local Similarity	100.0%;	Pred. No. 5.9e-158;		
Matches	334;	Conservative	0;	Mismatches 0; Indels 0; Gaps 0;
Qy	1	MKKKLEHHHHHTSAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFKLAALTCY	60	
Db	1	MKKKLEHHHHHTSAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFKLAALTCY	60	
Qy	61	VYDHLTFLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGDATACGDIISGLPVSARRGR	120	
Db	61	VYDHLTFLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGDATACGDIISGLPVSARRGR	120	
Qy	121	EILLGPADNFEQGWRLAPITAYSQQTRGLLGCIITSLTGRDKNQVEGEVQVWSTATQS	180	
Db	121	EILLGPADNFEQGWRLAPITAYSQQTRGLLGCIITSLTGRDKNQVEGEVQVWSTATQS	180	

```
Qy 181 FLATCVGVCWTVFHGAGSKTLGPKGPIQMTYNTVDODLVGWAQPPGARSMTPTCTGSS 240
Db 181 FLATCVGVCWTVFHGAGSKTLGPKGPIQMTYNTVDODLVGWAQPPGARSMTPTCTGSS 240
Qy 241 DLYLVTRHADVIPVRRRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRG 300
Db 241 DLYLVTRHADVIPVRRRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRG 300
Qy 301 VAKAVDFIPVESMETTMTTSSAWRHPQFGKKK 334
Db 301 VAKAVDFIPVESMETTMTTSSAWRHPQFGKKK 334
```

RESULT 2

```
US-10-650-585-4
; Sequence 4, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
; US-10-650-585-4
```

```
Query Match 100.0%; Score 1771; DB 15; Length 334;
Best Local Similarity 100.0%; Pred. No. 5.9e-158;
Matches 334; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 MKKKKLEHHHHHTSAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTY 60
Db 1 MKKKKLEHHHHHTSAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTY 60
Qy 61 VYDHLTPLQDWAHAGRLDVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGR 120
Db 61 VYDHLTPLQDWAHAGRLDVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGR 120
Qy 121 EILGPGADNPFEGQWRLAPITAYSQOTRGLLGCIIITSLTRDKNQVEGEVQVSTATQS 180
Db 121 EILGPGADNPFEGQWRLAPITAYSQOTRGLLGCIIITSLTRDKNQVEGEVQVSTATQS 180
Qy 181 FLATCVGVCWTVFHGAGSKTLGPKGPIQMTYNTVDODLVGWAQPPGARSMTPTCTGSS 240
Db 181 FLATCVGVCWTVFHGAGSKTLGPKGPIQMTYNTVDODLVGWAQPPGARSMTPTCTGSS 240
Qy 241 DLYLVTRHADVIPVRRRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRG 300
Db 241 DLYLVTRHADVIPVRRRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRG 300
Qy 301 VAKAVDFIPVESMETTMTTSSAWRHPQFGKKK 334
Db 301 VAKAVDFIPVESMETTMTTSSAWRHPQFGKKK 334
```

RESULT 3

```
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
```

```
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-2
```

```
Query Match 93.7%; Score 1660; DB 13; Length 409;
Best Local Similarity 100.0%; Pred. No. 2.1e-147;
Matches 315; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVDHLTPLQDWAHAG 75
Db 95 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVDHLTPLQDWAHAG 154
Qy 76 LRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 135
Db 155 LRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 214
Qy 136 RLLAPITAYSQOTRGLLGCIIITSLTRDKNQVEGEVQVSTATQSFLATCVGVCWTVFH 195
Db 215 RLLAPITAYSQOTRGLLGCIIITSLTRDKNQVEGEVQVSTATQSFLATCVGVCWTVFH 274
Qy 196 GAGSKTLGPKGPIQMTYNTVDODLVGWAQPPGARSMTPTCTGSSDLYLVTRHADVIPVR 255
Db 275 GAGSKTLGPKGPIQMTYNTVDODLVGWAQPPGARSMTPTCTGSSDLYLVTRHADVIPVR 334
Qy 256 RRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
Db 335 RRGDSRGLSPVSYLKGSGGPIILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 394
Qy 316 TMTTSSAWRHPQFGG 330
Db 395 TMTTSSAWRHPQFGG 409
```

RESULT 4

```
US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
; US-10-650-585-2
```

```
Query Match 93.7%; Score 1660; DB 15; Length 409;
Best Local Similarity 100.0%; Pred. No. 2.1e-147;
Matches 315; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVDHLTPLQDWAHAG 75
Db 95 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYVDHLTPLQDWAHAG 154
Qy 76 LRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 135
Db 155 LRDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGW 214
```

RESULT 6
US-10-650-585-10
; Sequence 10, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.

	Query Match	89.7%	Score 1589	DB 13	Length 341
	Best Local Similarity	100.0%	Pred. No. 8e-141		
	Matches 303	Conservative	0	Mismatches 0	Indels 0
	Gaps	0			
Qy	16	AGTTKVPYFVRAAGLIRACMLVRAKAGGHVYQWAFMKLAALTGYYVDHLTPELQDWAHAG	75		
Db	39	AGITKVPYFVRAAGLIRACMLVRAKAGGHVYQWAFMKLAALTGYYVDHLTPELQDWAHAG	98		


```
Qy 76 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 99 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 158
Qy 136 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATQSFLLATCVNGVCWTVFH 195
Db 159 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATQSFLLATCVNGVCWTVFH 218
Qy 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db 219 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 278
Qy 256 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 279 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 338
Qy 316 TMR 318
Db 339 TMR 341

RESULT 8
US-10-650-585-14
; Sequence 14, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-14

Query Match 89.7%; Score 1589; DB 15; Length 341;
Best Local Similarity 100.0%; Pred. No. 8e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
Db 39 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 98
Qy 76 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 99 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 158
Qy 136 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATQSFLLATCVNGVCWTVFH 195
Db 159 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATQSFLLATCVNGVCWTVFH 218
Qy 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db 219 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 278
Qy 256 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 279 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 338
Qy 316 TMR 318
Db 339 TMR 341
```

RESULT 9

```
US-10-017-736-13
; Sequence 13, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-13

Query Match 89.7%; Score 1589; DB 13; Length 352;
Best Local Similarity 100.0%; Pred. No. 8.3e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 16 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
Db 50 AGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 109
Qy 76 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
Db 110 LRDLAVPEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 169
Qy 136 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATQSFLLATCVNGVCWTVFH 195
Db 170 RLLAPITAYSQOTRGLGCIITSITGRDKNOVEGEVQVSTATQSFLLATCVNGVCWTVFH 229
Qy 196 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Db 230 GAGSKTLAGPKGPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 289
Qy 256 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
Db 290 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMET 349
Qy 316 TMR 318
Db 350 TMR 352

RESULT 10
US-10-650-585-13
; Sequence 13, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-13

Query Match 89.7%; Score 1589; DB 15; Length 352;
Best Local Similarity 100.0%; Pred. No. 8.3e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTCGYVYDHLTPLODWAHAG 75
DB 50 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTCGYVYDHLTPLODWAHAG 109
QY 76 LRDLAVAPVPIFSDMVEVKIITWGADTAACGDIISGLPVSARRGRILLGPADNFEQGW 135
DB 110 LRDLAVAPVPIFSDMVEVKIITWGADTAACGDIISGLPVSARRGRILLGPADNFEQGW 169
QY 136 RLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVYSTATQSFATCNGVCWTVFH 195
DB 170 RLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVYSTATQSFATCNGVCWTVFH 229
QY 196 GAGSKTLAGPKGPIITOMYTNVDQDLVGMQAPPGARSMTPTCGSSDLYLVTRHADVIPVR 255
DB 230 GAGSKTLAGPKGPIITOMYTNVDQDLVGMQAPPGARSMTPTCGSSDLYLVTRHADVIPVR 289
QY 256 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
DB 290 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 349
QY 316 TMR 318
DB 350 TMR 352

RESULT 11
US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

Query Match      89.7%; Score 1589; DB 13; Length 380;
Best Local Similarity 100.0%; Pred. No. 9.2e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTCGYVYDHLTPLODWAHAG 75
DB 78 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTCGYVYDHLTPLODWAHAG 137
QY 76 LRDLAVAPVPIFSDMVEVKIITWGADTAACGDIISGLPVSARRGRILLGPADNFEQGW 135
DB 138 LRDLAVAPVPIFSDMVEVKIITWGADTAACGDIISGLPVSARRGRILLGPADNFEQGW 197
QY 136 RLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVYSTATQSFATCNGVCWTVFH 195
DB 198 RLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVYSTATQSFATCNGVCWTVFH 257
QY 196 GAGSKTLAGPKGPIITOMYTNVDQDLVGMQAPPGARSMTPTCGSSDLYLVTRHADVIPVR 255
DB 258 GAGSKTLAGPKGPIITOMYTNVDQDLVGMQAPPGARSMTPTCGSSDLYLVTRHADVIPVR 317
QY 256 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
DB 318 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 377
QY 316 TMR 318
DB 378 TMR 380

RESULT 12
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

Query Match      89.7%; Score 1589; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 9.2e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTCGYVYDHLTPLODWAHAG 75
DB 78 AGITKVPYFVRAOGLIRACMLVRKAAGGHYVQMAFMKLAALTCGYVYDHLTPLODWAHAG 137
QY 76 LRDLAVAPVPIFSDMVEVKIITWGADTAACGDIISGLPVSARRGRILLGPADNFEQGW 135
DB 138 LRDLAVAPVPIFSDMVEVKIITWGADTAACGDIISGLPVSARRGRILLGPADNFEQGW 197
QY 136 RLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVYSTATQSFATCNGVCWTVFH 195
DB 198 RLLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVYSTATQSFATCNGVCWTVFH 257
QY 196 GAGSKTLAGPKGPIITOMYTNVDQDLVGMQAPPGARSMTPTCGSSDLYLVTRHADVIPVR 255
DB 258 GAGSKTLAGPKGPIITOMYTNVDQDLVGMQAPPGARSMTPTCGSSDLYLVTRHADVIPVR 317
QY 256 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
DB 318 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 377
QY 316 TMR 318
DB 378 TMR 380

RESULT 13
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11
```

Query Match 89.7%; Score 1589; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 9.6e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQVAFMKLAALTCGYVYDHLTPLODWAHAG 75
DB 91 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQVAFMKLAALTCGYVYDHLTPLODWAHAG 150

QY 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
DB 151 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 210

QY 136 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVWSTATQSFATCVCNGVCTVVFH 195
DB 211 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVWSTATQSFATCVCNGVCTVVFH 270

QY 196 GAGSKTLAGPKGPITQMYTNVDQDLVGWQAPPGARSMTPTCGSSDLYLVTTRHADVIPVR 255
DB 271 GAGSKTLAGPKGPITQMYTNVDQDLVGWQAPPGARSMTPTCGSSDLYLVTTRHADVIPVR 330

QY 256 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
DB 331 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 390

QY 316 TMR 318
DB 391 TMR 393

RESULT 14
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11

Query Match 89.7%; Score 1589; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 9.6e-141;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 16 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQVAFMKLAALTCGYVYDHLTPLODWAHAG 75
DB 91 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQVAFMKLAALTCGYVYDHLTPLODWAHAG 150

QY 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
DB 151 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 210

QY 136 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVWSTATQSFATCVCNGVCTVVFH 195
DB 211 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVWSTATQSFATCVCNGVCTVVFH 270

QY 196 GAGSKTLAGPKGPITQMYTNVDQDLVGWQAPPGARSMTPTCGSSDLYLVTTRHADVIPVR 255
DB 271 GAGSKTLAGPKGPITQMYTNVDQDLVGWQAPPGARSMTPTCGSSDLYLVTTRHADVIPVR 330

QY 256 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315

Db 331 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 390

QY 316 TMR 318
DB 391 TMR 393

RESULT 15
US-10-017-736-18
; Sequence 18, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-18

Query Match 89.2%; Score 1580; DB 13; Length 303;
Best Local Similarity 99.7%; Pred. No. 4.8e-140;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 16 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQVAFMKLAALTCGYVYDHLTPLODWAHAG 75
DB 1 AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQVAFMKLAALTCGYVYDHLTPLODWAHAG 60

QY 76 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 135
DB 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

QY 136 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVWSTATQSFATCVCNGVCTVVFH 195
DB 121 RLLAPITAYSQOQTRGLLGCIITSLTGRDKNOVEGEVQVWSTATQSFATCVCNGVCTVVFH 180

QY 196 GAGSKTLAGPKGPITQMYTNVDQDLVGWQAPPGARSMTPTCGSSDLYLVTTRHADVIPVR 255
DB 181 GAGSKTLAGPKGPITQMYTNVDQDLVGWQAPPGARSMTPTCGSSDLYLVTTRHADVIPVR 240

QY 256 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
DB 241 RRGDSRGSLLSPRPVSYLKSGSGPILCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 300

QY 316 TMR 318
DB 301 TMR 303

Search completed: May 26, 2005, 22:42:56
Job time : 72.2965 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 17.5854 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: US-10-650-585-10

Perfect score: 1589

Sequence: 1 AGITKVPYFVRAOGLIRACM.....RGVAKAVDFIPVESMETTMR 303

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

1: /cgn2_6/ptodata/1/iaa/5A COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PTCUS COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1589	100.0	303	4	US-10-017-736C-10
2	1589	100.0	334	4	US-10-017-736C-4
3	1589	100.0	341	4	US-10-017-736C-14
4	1589	100.0	352	4	US-10-017-736C-13
5	1589	100.0	380	4	US-10-017-736C-12
6	1589	100.0	393	4	US-10-017-736C-11
7	1589	100.0	409	4	US-10-017-736C-2
8	1580	99.4	303	4	US-10-017-736C-18
9	1579	99.4	303	4	US-10-017-736C-16
10	1570	98.8	301	4	US-10-017-736C-17
11	1532	96.4	292	4	US-10-017-736C-15
12	1530	96.3	2201	4	US-09-539-601-6
13	1530	96.3	2201	4	US-09-539-601-15
14	1530	96.3	2201	4	US-10-029-907-3
15	1530	96.3	3010	4	US-09-539-601-3
16	1530	96.3	3010	4	US-09-539-601-21
17	1530	96.3	3010	4	US-09-539-601-27
18	1527	96.1	1692	3	US-09-263-933-4
19	1527	96.1	1692	4	US-09-919-901-4
20	1527	96.1	1692	4	US-10-191-966-4
21	1527	96.1	2307	3	US-09-263-933-2
22	1527	96.1	2307	4	US-09-919-901-2
23	1527	96.1	2307	4	US-10-191-966-2
24	1524	95.9	1692	3	US-09-263-933-11
25	1524	95.9	1692	4	US-09-919-901-11
26	1524	95.9	1692	4	US-10-191-966-11
27	1524	95.9	2307	3	US-09-263-933-9

28	1524	95.9	2307	4	US-09-919-901-9	Sequence 9, Appli
29	1524	95.9	2307	4	US-10-191-966-9	Sequence 9, Appli
30	1523	95.8	3010	4	US-09-539-601-33	Sequence 33, Appl
31	1515	95.3	1692	3	US-09-263-933-18	Sequence 18, Appl
32	1515	95.3	1692	4	US-09-919-901-18	Sequence 18, Appl
33	1515	95.3	1692	4	US-10-191-966-18	Sequence 18, Appl
34	1515	95.3	2307	3	US-09-263-933-16	Sequence 16, Appl
35	1515	95.3	2307	4	US-09-919-901-16	Sequence 16, Appl
36	1515	95.3	2307	4	US-10-191-966-16	Sequence 16, Appl
37	1504	94.7	3010	3	US-09-014-416-3	Sequence 3, Appli
38	1478	93.0	2013	1	US-08-324-977-12	Sequence 12, Appl
39	1478	93.0	2013	2	US-08-384-616-12	Sequence 12, Appl
40	1478	93.0	2013	2	US-08-904-686A-12	Sequence 12, Appl
41	1478	93.0	2013	3	US-09-315-850-12	Sequence 12, Appl
42	1478	93.0	2201	3	US-08-952-981A-2	Sequence 2, Appli
43	1478	93.0	2620	1	US-08-324-977-32	Sequence 32, Appl
44	1478	93.0	2620	2	US-08-384-616-32	Sequence 32, Appl
45	1478	93.0	2620	2	US-08-904-686A-32	Sequence 32, Appl

ALIGNMENTS

RESULT 1

US-10-017-736C-10
; Sequence 10, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamare, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-10

Query Match	100.0%;	Score	1589;	DB	4;	Length	303;
Best Local Similarity	100.0%;	Pred. No.	2.3e-151;				
Matches	303;	Conservative	0;	Mismatches	0;	Indels	0;
Gaps	0;						
QY	1	AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG	60				
Db	1	AGITKVPYFVRAOGLIRACMLVRKAAGHHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG	60				
QY	61	LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGFPADNFEQGW	120				
Db	61	LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGFPADNFEQGW	120				
QY	121	RLAPITAYSQQTRGLLGCIITSLTGRDKNQVEGVQVWSTATQSPFLATCVNGVCWTVFH	180				
Db	121	RLAPITAYSQQTRGLLGCIITSLTGRDKNQVEGVQVWSTATQSPFLATCVNGVCWTVFH	180				
QY	181	GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVLPVR	240				
Db	181	GAGSKTLAGPKGITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVLPVR	240				
QY	241	RRGDSRGSLLSPRPVSVYLGKSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET	300				
Db	241	RRGDSRGSLLSPRPVSVYLGKSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET	300				
QY	301	TMR 303					

```
Db          301 TMR 303

RESULT 2
US-10-017-736C-4
; Sequence 4, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-4

Query Match      100.0%; Score 1589; DB 4; Length 334;
Best Local Similarity 100.0%; Pred. No. 2.6e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGYVYVDHLTPLODWAHAG 60
Db      16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGYVYVDHLTPLODWAHAG 75
Qy      61 LRDLAVALPEVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 120
Db      76 LRDLAVALPEVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 135
Qy      121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVSTATQSFATCNGVCWTVEH 180
Db      136 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVSTATQSFATCNGVCWTVEH 195
Qy      181 GAGSKTLGAPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db      196 GAGSKTLGAPKGPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
Qy      241 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 300
Db      256 RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMET 315
Qy      301 TMR 303
Db      316 TMR 318

RESULT 3
US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-13

Query Match      100.0%; Score 1589; DB 4; Length 352;
Best Local Similarity 100.0%; Pred. No. 2.8e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGYVYVDHLTPLODWAHAG 60
Db      50 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGYVYVDHLTPLODWAHAG 109
Qy      61 LRDLAVALPEVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 120
Db      110 LRDLAVALPEVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 169
Qy      121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVSTATQSFATCNGVCWTVEH 180
```

Db 170 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVEH 229
Qy 181 GAGSKTLAGPKGPIQMTYTNVDQLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
Db 230 GAGSKTLAGPKGPIQMTYTNVDQLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 289
Qy 241 RRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 290 RRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 349
Qy 301 TMR 303
Db 350 TMR 352

RESULT 5

US-10-017-736C-12

; Sequence 12, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Amin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 12

; LENGTH: 380

; TYPE: PRT

; ORGANISM: HCV

US-10-017-736C-12

Query Match 100.0%; Score 1589; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 3.1e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db 78 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 137
Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 138 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 197
Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVEH 180
Db 198 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVEH 257
Qy 181 GAGSKTLAGPKGPIQMTYTNVDQLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
Db 258 GAGSKTLAGPKGPIQMTYTNVDQLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 317
Qy 241 RRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 318 RRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 377
Qy 301 TMR 303
Db 378 TMR 380

RESULT 6

US-10-017-736C-11

; Sequence 11, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Amin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11

Query Match 100.0%; Score 1589; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 3.3e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db 91 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 150
Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 151 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 210
Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVEH 180
Db 211 RLLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVEH 270
Qy 181 GAGSKTLAGPKGPIQMTYTNVDQLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
Db 271 GAGSKTLAGPKGPIQMTYTNVDQLVGVQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 330
Qy 241 RRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db 331 RRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 390
Qy 301 TMR 303
Db 391 TMR 393

RESULT 7

US-10-017-736C-2

; Sequence 2, Application US/10017736C

; Patent No. 6815159

; GENERAL INFORMATION:

; APPLICANT: Thibeault, Diane

; APPLICANT: Lamarre, Daniel

; APPLICANT: Maurice, Roger

; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Amin

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease

; FILE REFERENCE: 13/082

; CURRENT APPLICATION NUMBER: US/10/017,736C

; CURRENT FILING DATE: 2001-12-14

; PRIOR APPLICATION NUMBER: 60/256,031

; PRIOR FILING DATE: 2000-12-15

; NUMBER OF SEQ ID NOS: 25

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 2

; LENGTH: 409

; TYPE: PRT

; ORGANISM: HCV

US-10-017-736C-2

```
Query Match      100.0%; Score 1589; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 3.5e-151;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db 95 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 154

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 155 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 214

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCVNGVCWTVFH 180
Db 215 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCVNGVCWTVFH 274

Qy 181 GAGSKTLAGPKGPIITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 275 GAGSKTLAGPKGPIITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHVGIFRAAAVCTRGVAKAVDFIPVESMET 300
Db 335 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHVGIFRAAAVCTRGVAKAVDFIPVESMET 394

Qy 301 TMR 303
Db 395 TMR 397

RESULT 8
US-10-017-736C-18
; Sequence 18, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-18

Query Match      99.4%; Score 1580; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 1.8e-150;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCVNGVCWTVFH 180
Db 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCVNGVCWTVFH 180

Qy 181 GAGSKTLAGPKGPIITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 181 GAGSKTLAGPKGPIITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHVGIFRAAAVCTRGVAKAVDFIPVESMET 300
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHVGIFRAAAVCTRGVAKAVDFIPVESMET 300

Qy 301 TMR 303
Db 301 TMR 303

RESULT 10
US-10-017-736C-17
; Sequence 17, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-17

Query Match      99.4%; Score 1579; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 2.3e-150;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCVNGVCWTVFH 180
Db 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCVNGVCWTVFH 180

Qy 181 GAGSKTLAGPKGPIITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 181 GAGSKTLAGPKGPIITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHVGIFRAAAVCTRGVAKAVDFIPVESMET 300
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHVGIFRAAAVCTRGVAKAVDFIPVESMET 300

Qy 301 TMR 303
Db 301 TMR 303

RESULT 9
US-10-017-736C-16
; Sequence 16, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-16

Query Match      99.4%; Score 1579; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 2.3e-150;
Matches 302; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60

Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120

Qy 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCVNGVCWTVFH 180
Db 121 RLLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVWSTATOSFLATCVNGVCWTVFH 180

Qy 181 GAGSKTLAGPKGPIITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db 181 GAGSKTLAGPKGPIITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240

Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHVGIFRAAAVCTRGVAKAVDFIPVESMET 300
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPSGHVGIFRAAAVCTRGVAKAVDFIPVESMET 300

Qy 301 TMR 303
Db 301 TMR 303
```



```

; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 301
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-17

Query Match
Best Local Similarity 98.8%; Score 1570; DB 4; Length 301;
Matches 301; Conservative 0; Mismatches 0; Indels 2; Gaps 1;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 60
DB 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 60
QY 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
DB 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
QY 121 RLLAPITAYSQOQRLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCVNGVCTVVFH 180
DB 121 RL--PITAYSQOQRLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCVNGVCTVVFH 178
QY 181 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
DB 179 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 238
QY 241 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
DB 239 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 298
QY 301 TMR 303
DB 299 TMR 301

RESULT 11
US-10-017-736C-15
; Sequence 15, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 292
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-15

Query Match
Best Local Similarity 96.4%; Score 1532; DB 4; Length 292;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 12 AOGLIRACMLVRKAAGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 71
DB 1 AOGLIRACMLVRKAAGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPV 60

```

```

QY 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWLLAPITAYSQ 131
DB 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWLLAPITAYSQ 120
QY 132 QTRGLLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCVNGVCTVVFHAGSKTLAGPK 191
DB 121 QTRGLLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCVNGVCTVVFHAGSKTLAGPK 180
QY 192 GPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPRRGRSRLS 251
DB 181 GPITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPRRGRSRLS 240
QY 252 PRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303
DB 241 PRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292

RESULT 12
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagher, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match
Best Local Similarity 96.3%; Score 1530; DB 4; Length 2201;
Matches 288; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 60
DB 95 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQVAFMKLAALTGTYYVDHLTPLODWAHAG 154
QY 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
DB 155 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 214
QY 121 RLLAPITAYSQOQRLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCVNGVCTVVFH 180
DB 215 RLLAPITAYSQOQRLGCIITSLTGRDKNQVEGEVQVSTATOSFLATCVNGVCTVVFH 274
QY 181 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
DB 275 GAGSKTLAGPKGPIITOMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 334
QY 241 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
DB 335 RRGDSRGSLLSPRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 394
QY 301 TMR 303
DB 395 TMR 397

RESULT 13
US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagher, Ralf FW

```

```
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PR1
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match          96.3%; Score 1530; DB 4; Length 2201;
Best Local Similarity 95.0%; Pred. No. 3.3e-144;
Matches 288; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHVQVMAFMKLAALTCTYYVDHLTLPLODWAHAG 60
DB 95 AGITKVPYFVRAHGLIRACMLVRKAGGHVQVQALMKLAALTCTYYVDHLTLPURDWAHAG 154
QY 61 LRD LAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGW 120
DB 155 LRD LAVAVEPVFSDMETKVIITWGADTAACGDIILGLPVSARRGREIILGPADNFEQGW 214
QY 121 RLLAPITAYSQOTRGLLGCIIITSLTGRDNQVGEVQVWSTATQSFATCVCNGVCTVFFH 180
DB 215 RLLAPITAYSQOTRGLLGCIIITSLTGRDNQVGEVQVWSTATQSFATCVCNGVCTVFFH 274
QY 181 GAGSKTLAGPKGPIITOMYTNVDODLVGWOAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVR 240
DB 275 GAGSKTLAGPKGPIITOMYTNVDODLVGWOAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVR 334
QY 241 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
DB 335 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 394
QY 301 TMR 303
DB 395 TMR 397

RESULT 15
US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagler, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3010
; TYPE: PR1
; ORGANISM: Hepatitis C virus
US-09-539-601-3

Query Match          96.3%; Score 1530; DB 4; Length 3010;
Best Local Similarity 95.0%; Pred. No. 5.2e-144;
Matches 288; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHVQVMAFMKLAALTCTYYVDHLTLPLODWAHAG 60
DB 904 AGITKVPYFVRAHGLIRACMLVRKAGGHVQVQALMKLAALTCTYYVDHLTLPURDWAHAG 963
QY 61 LRD LAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGW 120
DB 964 LRD LAVAVEPVFSDMETKVIITWGADTAACGDIILGLPVSARRGREIILGPADNFEQGW 1023
QY 121 RLLAPITAYSQOTRGLLGCIIITSLTGRDNQVGEVQVWSTATQSFATCVCNGVCTVFFH 180
DB 1024 RLLAPITAYSQOTRGLLGCIIITSLTGRDNQVGEVQVWSTATQSFATCVCNGVCTVFFH 1083
QY 181 GAGSKTLAGPKGPIITOMYTNVDODLVGWOAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVR 240
DB 1084 GAGSKTLAGPKGPIITOMYTNVDODLVGWOAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVR 1143
QY 241 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
DB 1144 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 1203
QY 301 TMR 303
DB 395 TMR 397

; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PR1
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match          96.3%; Score 1530; DB 4; Length 2201;
Best Local Similarity 95.0%; Pred. No. 3.3e-144;
Matches 288; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

QY 1 AGITKVPYFVRAOGLIRACMLVRKAAGGHVQVMAFMKLAALTCTYYVDHLTLPLODWAHAG 60
DB 95 AGITKVPYFVRAHGLIRACMLVRKAGGHVQVQALMKLAALTCTYYVDHLTLPURDWAHAG 154
QY 61 LRD LAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGW 120
DB 155 LRD LAVAVEPVFSDMETKVIITWGADTAACGDIILGLPVSARRGREIILGPADNFEQGW 214
QY 121 RLLAPITAYSQOTRGLLGCIIITSLTGRDNQVGEVQVWSTATQSFATCVCNGVCTVFFH 180
DB 215 RLLAPITAYSQOTRGLLGCIIITSLTGRDNQVGEVQVWSTATQSFATCVCNGVCTVFFH 274
QY 181 GAGSKTLAGPKGPIITOMYTNVDODLVGWOAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVR 240
DB 275 GAGSKTLAGPKGPIITOMYTNVDODLVGWOAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVR 334
QY 241 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
DB 335 RRGDSRGSLLSPRPVSYLKSGSGPILLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMET 394
QY 301 TMR 303
DB 395 TMR 397

RESULT 14
US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PR1
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match          96.3%; Score 1530; DB 4; Length 2201;
Best Local Similarity 95.0%; Pred. No. 3.3e-144;
```

Db 1204 TMR 1206

Search completed: May 26, 2005, 22:03:38
Job time : 18.5854 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 52.7562 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-10
Perfect score: 1589
Sequence: 1 AGITKVPYFVRAOGLIRACM.....RGVAXAVDFIPVSMETMR 303

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1589	100.0	303	13	US-10-017-736-10 Sequence 10, Appl
2	1589	100.0	303	15	US-10-650-585-10 Sequence 10, Appl
3	1589	100.0	334	13	US-10-017-736-4 Sequence 4, Appl
4	1589	100.0	334	15	US-10-650-585-4 Sequence 4, Appl
5	1589	100.0	341	13	US-10-017-736-14 Sequence 14, Appl
6	1589	100.0	341	15	US-10-650-585-14 Sequence 14, Appl
7	1589	100.0	352	13	US-10-017-736-13 Sequence 13, Appl
8	1589	100.0	352	15	US-10-650-585-13 Sequence 13, Appl
9	1589	100.0	380	13	US-10-017-736-12 Sequence 12, Appl
10	1589	100.0	380	15	US-10-650-585-12 Sequence 12, Appl
11	1589	100.0	393	13	US-10-017-736-11 Sequence 11, Appl
12	1589	100.0	393	15	US-10-650-585-11 Sequence 11, Appl
13	1589	100.0	409	13	US-10-017-736-2 Sequence 2, Appl

14	1589	100.0	409	15	US-10-650-585-2	Sequence 2, Appl
15	1580	99.4	303	13	US-10-017-736-18	Sequence 18, Appl
16	1580	99.4	303	15	US-10-650-585-18	Sequence 18, Appl
17	1579	99.4	303	13	US-10-017-736-16	Sequence 16, Appl
18	1579	99.4	303	15	US-10-650-585-16	Sequence 16, Appl
19	1570	98.8	301	13	US-10-017-736-17	Sequence 17, Appl
20	1570	98.8	301	15	US-10-650-585-17	Sequence 17, Appl
21	1532	96.4	292	13	US-10-017-736-15	Sequence 15, Appl
22	1532	96.4	292	15	US-10-650-585-15	Sequence 15, Appl
23	1530	96.3	2201	13	US-10-029-907-3	Sequence 3, Appl
24	1530	96.3	2201	14	US-10-309-561-3	Sequence 3, Appl
25	1530	96.3	2201	16	US-10-789-355-3	Sequence 3, Appl
26	1530	96.3	3010	15	US-10-467-000-1	Sequence 1, Appl
27	1530	96.3	3010	16	US-10-333-449A-34	Sequence 34, Appl
28	1527	96.1	1692	10	US-09-919-901-4	Sequence 4, Appl
29	1527	96.1	1692	14	US-10-191-966-4	Sequence 4, Appl
30	1527	96.1	2307	10	US-09-919-901-2	Sequence 2, Appl
31	1527	96.1	2307	14	US-10-191-966-2	Sequence 2, Appl
32	1524	95.9	1692	10	US-09-919-901-11	Sequence 11, Appl
33	1524	95.9	1692	14	US-10-191-966-11	Sequence 11, Appl
34	1524	95.9	2307	10	US-09-919-901-9	Sequence 9, Appl
35	1524	95.9	2307	14	US-10-191-966-9	Sequence 9, Appl
36	1515	95.3	1692	10	US-09-919-901-18	Sequence 18, Appl
37	1515	95.3	1692	14	US-10-191-966-18	Sequence 18, Appl
38	1515	95.3	2307	10	US-09-919-901-16	Sequence 16, Appl
39	1515	95.3	2307	14	US-10-191-966-16	Sequence 16, Appl
40	1478	93.0	2201	13	US-10-085-476-2	Sequence 2, Appl
41	1405	88.4	3011	9	US-09-742-659-4	Sequence 4, Appl
42	1405	88.4	3011	10	US-09-891-894-3	Sequence 3, Appl
43	1405	88.4	3011	14	US-10-184-150-3	Sequence 3, Appl
44	1405	88.4	3011	15	US-10-328-997-3	Sequence 3, Appl
45	1405	88.4	3012	9	US-09-238-076-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-10-017-736-10
; Sequence 10, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-10

Query Match 100.0%; Score 1589; DB 13; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.7e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTFLQDMAHAG	60
Db	1	AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTFLQDMAHAG	60
Qy	61	LRDLAVAVPEVIFSDMEVKIITWGAADTAACGDIISGLPVSARRGREILLGPADNPEGQGW	120
Db	61	LRDLAVAVPEVIFSDMEVKIITWGAADTAACGDIISGLPVSARRGREILLGPADNPEGQGW	120
Qy	121	RLLAIPITAYSOQTRGLLGCITSLTGRDKNQVEGVQVWSTATOSFLATCVNGVCWTVFH	180
Db	121	RLLAIPITAYSOQTRGLLGCITSLTGRDKNQVEGVQVWSTATOSFLATCVNGVCWTVFH	180

Qy 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
|
Db 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
|
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
|
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
|
Qy 301 TMR 303
|
Db 301 TMR 303
|

RESULT 2

US-10-650-585-10
; Sequence 10, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-10

Query Match 100.0%; Score 1589; DB 15; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.7e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
|
Db 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
|
Qy 61 LRDLA VAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 120
|
Db 61 LRDLA VAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 120
|
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVVSSTATQSFATCNGVCWTVFH 180
|
Db 121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVVSSTATQSFATCNGVCWTVFH 180
|
Qy 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
|
Db 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
|
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
|
Db 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
|
Qy 301 TMR 303
|
Db 301 TMR 303
|

RESULT 3

US-10-017-736-4
; Sequence 4, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736

; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-4

Query Match 100.0%; Score 1589; DB 13; Length 334;
Best Local Similarity 100.0%; Pred. No. 1.9e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
|
Db 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
|
Qy 61 LRDLA VAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 120
|
Db 76 LRDLA VAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 135
|
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVVSSTATQSFATCNGVCWTVFH 180
|
Db 136 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVVSSTATQSFATCNGVCWTVFH 195
|
Qy 181 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 240
|
Db 196 GAGSKTLAGPKGPITOMYTNVDQDLVQWQAPPGARSMPTCTCGSSDLYLVTRHADVIPVR 255
|
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 300
|
Db 256 RRGDSRGSLLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 315
|
Qy 301 TMR 303
|
Db 316 TMR 318
|

RESULT 4

US-10-650-585-4
; Sequence 4, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-4

Query Match 100.0%; Score 1589; DB 15; Length 334;
Best Local Similarity 100.0%; Pred. No. 1.9e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 60
|
Db 16 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAG 75
|
Qy 61 LRDLA VAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 120
|
Db 76 LRDLA VAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRGREILLGPADNFEQGW 135
|

Qy 121 RLLAPITAYSOQTRGLGCIITSITGRDKNQVEGEVQVSTATQSFILATCVNGVCTVVFH 180
|
Db 136 RLLAPITAYSOQTRGLGCIITSITGRDKNQVEGEVQVSTATQSFILATCVNGVCTVVFH 195
|
Qy 181 GAGSKTLAGPKGPIITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
|
Db 196 GAGSKTLAGPKGPIITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 255
|
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 300
|
Db 256 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 315
|
Qy 301 TMR 303
|
Db 316 TMR 318

RESULT 5

US-10-017-736-14
; Sequence 14, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Fast-SEQ for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-14

Query Match 100.0%; Score 1589; DB 13; Length 341;
Best Local Similarity 100.0%; Pred. No. 2e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
|
Db 39 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 98
|
Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
|
Db 99 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 158
|
Qy 121 RLLAPITAYSOQTRGLGCIITSITGRDKNQVEGEVQVSTATQSFILATCVNGVCTVVFH 180
|
Db 159 RLLAPITAYSOQTRGLGCIITSITGRDKNQVEGEVQVSTATQSFILATCVNGVCTVVFH 218
|
Qy 181 GAGSKTLAGPKGPIITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
|
Db 219 GAGSKTLAGPKGPIITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 278
|
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 300
|
Db 279 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 338
|
Qy 301 TMR 303
|
Db 339 TMR 341

RESULT 6

US-10-650-585-14
; Sequence 14, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR FILING DATE: 2003-08-28
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Fast-SEQ for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-14

Query Match 100.0%; Score 1589; DB 15; Length 341;
Best Local Similarity 100.0%; Pred. No. 2e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
|
Db 39 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 98
|
Qy 61 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
|
Db 99 LRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 158
|
Qy 121 RLLAPITAYSOQTRGLGCIITSITGRDKNQVEGEVQVSTATQSFILATCVNGVCTVVFH 180
|
Db 159 RLLAPITAYSOQTRGLGCIITSITGRDKNQVEGEVQVSTATQSFILATCVNGVCTVVFH 218
|
Qy 181 GAGSKTLAGPKGPIITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
|
Db 219 GAGSKTLAGPKGPIITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 278
|
Qy 241 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 300
|
Db 279 RRGDSRGSLLSPRPVSYLKGSSGGPILCPGSHAVGIFRAAAVCTRGVAKAVDFIPVESMET 338
|
Qy 301 TMR 303
|
Db 339 TMR 341

RESULT 7

US-10-017-736-13
; Sequence 13, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Fast-SEQ for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-13

Query Match 100.0%; Score 1589; DB 13; Length 352;
Best Local Similarity 100.0%; Pred. No. 2e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
|
Db 50 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 109
|

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db |||||
78 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 137
|||
Qy 61 LRLDAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db |||||
138 LRLDAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 197
|||
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVFH 180
Db |||||
198 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVFH 257
|||
Qy 181 GAGSKTLAGPKGPIITOMYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db |||||
258 GAGSKTLAGPKGPIITOMYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 317
|||
Qy 241 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db |||||
318 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 377
|||
Qy 301 TMR 303
Db |||
378 TMR 380

RESULT 11
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

Query Match 100.0%; Score 1589; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 2.4e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db |||||
91 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 150
|||
Qy 61 LRLDAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db |||||
151 LRLDAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 210
|||
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVFH 180
Db |||||
211 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVFH 270
|||
Qy 181 GAGSKTLAGPKGPIITOMYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db |||||
271 GAGSKTLAGPKGPIITOMYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 330
|||
Qy 241 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db |||||
331 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 390
|||
Qy 301 TMR 303
Db |||
391 TMR 393

RESULT 12
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11

Query Match 100.0%; Score 1589; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 2.4e-150;
Matches 303; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 60
Db |||||
91 AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLQDWAHAG 150
|||
Qy 61 LRLDAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 120
Db |||||
151 LRLDAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGW 210
|||
Qy 121 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVFH 180
Db |||||
211 RLLAPITAYSQOTRGLGCIITSITGRDKNQVEGEVQVWSTATOSFLATCNGVCWTVFH 270
|||
Qy 181 GAGSKTLAGPKGPIITOMYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 240
Db |||||
271 GAGSKTLAGPKGPIITOMYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVR 330
|||
Qy 241 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 300
Db |||||
331 RRGDSRGLSPRPVSYLKGSSGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMET 390
|||
Qy 301 TMR 303
Db |||
391 TMR 393

RESULT 13
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2

Query Match	100.0%	Score 1589;	DB 13;	Length 409;
Best Local Similarity	100.0%;	Pred. No. 2.5e-150;		
Matches 303;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy 1	AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTGVYVDHLTPLQDWAHAG	60		
Db				
Qy 95	AGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGTGVYVDHLTPLQDWAHAG	154		
Db				
Qy 61	LRDLAVAVEPVIFSDMEVKIITWGADTAAACGDIISGLPVSARRGREILLGPADNFEQGQW	120		
Db				
Qy 155	LRDLAVAVEPVIFSDMEVKIITWGADTAAACGDIISGLPVSARRGREILLGPADNFEQGQW	214		
Db				
Qy 121	RLIAPITAYSQOTRGLLGCIITSLTGRDKXQVEGEVQVSTATQSFATCNGVCWTVFHF	180		
Db				
Qy 215	RLIAPITAYSQOTRGLLGCIITSLTGRDKXQVEGEVQVSTATQSFATCNGVCWTVFHF	274		
Db				
Qy 181	GAGSKTLIAGPKGPITQMYTNNVDQLVGMQAPPGARSMTPTCCGSSDLYLVTRHADVI	240		
Db				
Qy 275	GAGSKTLIAGPKGPITQMYTNNVDQLVGMQAPPGARSMTPTCCGSSDLYLVTRHADVI	334		
Db				
Qy 241	RRGDSRGLLSRPVSVYKGSNGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET	300		
Db				
Qy 335	RRGDSRGLLSRPVSVYKGSNGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET	394		
Db				
Qy 301	TMR 303			
Db				
Qy 395	TMR 397			
Db				

Query Match	100.0%	Score 1589;	DB 15;	Length 409;
Best Local Similarity	100.0%;	Pred. No. 2.5e-150;		
Matches 303;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	AGITKVPYFVRAQGLIRACMLVRKAAGHYVQAFMKLAALTGYVVDHLTPLOQDWAHAG	60	
Db	95	AGITKVPYFVRAQGLIRACMLVRKAAGHYVQAFMKLAALTGYVVDHLTPLOQDWAHAG	154	
Qy	61	LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGQW	120	
Db	155	LRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGQW	214	
Qy	121	RL LAPITAYSQOTRGLGCIITSTLGRDKNOVEGEVQVVSATQSFLATCNGVCWTVFH	180	
Db	215	RL LAPITAYSQOTRGLGCIITSTLGRDKNOVEGEVQVVSATQSFLATCNGVCWTVFH	274	
Qy	181	GAGSKTLAGPKGPI TOMYTNVDQLVGWQAPPGARSMTPTCCGSSDLYLVTRHADVIPVR	240	
Db	275	GAGSKTLAGPKGPI TOMYTNVDQLVGWQAPPGARSMTPTCCGSSDLYLVTRHADVIPVR	334	
Qy	241	RRGDSRGLSLSPRVSVYIKGSSGGFLLCPSGHVGIFRAAYVCTRGVAKAVDIFIPVSMET	300	

```

Db      335  RRGDSRGSLSPRPVSYLKGSSGGPLICPSGHAVGIFRAAVCTRGVAKAVDFIPVESMET 394
Qy      301  TMR 303
      |||
Db      395  TMR 397

RESULT 15
US-10-017-736-18
; Sequence 18, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-18

```

Query Match	99.4%	Score 1580;	DB 13;	Length 303;
Best Local Similarity	99.7%;	Pred. No. 1.3e-149;		
Matches 302;	Conservative 0;	Mismatches 1;	Indels 0;	Gaps 0;
Qy	1	AGITKVPYFVRAOGLIRACMLVRKAAGHYVQAMFKLAALTGTYYDHLTPLODWAHAG	60	
Db	1	AGITKVPYFVRAOGLIRACMLVRKAAGHYVQAMFKLAALTGTYYDHLTPLODWAHAG	60	
Qy	61	LRDLAVAVEPVIFSDMEVKIITWGADTAAACGDIISGLPVSARRGREILLGPADNFEQGQW	120	
Db	61	LRDLAVAVEPVIFSDMEVKIITWGADTAAACGDIISGLPVSARRGREILLGPADNFEQGQW	120	
Qy	121	RLLAPIITAYSQOQTRGLLGCIITSITGRDKNOVEGEVQVVSATQSFATCNGVCWTVFH	180	
Db	121	RLLAPIITAYSQOQTRGLLGCIITSITGRDKNOVEGEVQVVSATQSFATCNGVCWTVFH	180	
Qy	181	GAGSKTILAGPKGPIITQMYTNNVDOLVGWQAPPGARSMTPTCCGSSDLYLVTRHADVIPR	240	
Db	181	GAGSKTILAGPKGPIITQMYTNNVDOLVGWQAPPGARSMTPTCCGSSDLYLVTRHADVIPR	240	
Qy	241	RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAAVCTRGVAKAVDFIPVESMET	300	
Db	241	RRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAAVCTRGVAKAVDFIPVESMET	300	
Qy	301	TMR 303		
Db	301	TMR 303		

Search completed: May 26, 2005, 22:42:57
Job time : 53.899 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 22.8088 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: US-10-650-585-11
Perfect score: 2053
Sequence: 1 MAASCGGAVFIGLALLTSP.....RGVAKAVDFIPVSMETMR 393

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA.*
1: /cgm2_6/ptodata/1/iaa/5A.COMB.pep.*
2: /cgm2_6/ptodata/1/iaa/5B.COMB.pep.*
3: /cgm2_6/ptodata/1/iaa/6A.COMB.pep.*
4: /cgm2_6/ptodata/1/iaa/6B.COMB.pep.*
5: /cgm2_6/ptodata/1/iaa/PTCUS.COMB.pep.*
6: /cgm2_6/ptodata/1/iaa/backfiles.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2053	100.0	393	4	US-10-017-736C-11
2	2053	100.0	409	4	US-10-017-736C-2
3	1987	96.8	380	4	US-10-017-736C-12
4	1951	95.0	2201	4	US-09-539-601-6
5	1951	95.0	2201	4	US-09-539-601-15
6	1951	95.0	2201	4	US-10-029-907-3
7	1951	95.0	3010	4	US-09-539-601-3
8	1951	95.0	3010	4	US-09-539-601-21
9	1951	95.0	3010	4	US-09-539-601-27
10	1946	94.8	1692	3	US-09-263-933-4
11	1946	94.8	1692	4	US-09-919-901-4
12	1946	94.8	1692	4	US-10-191-966-4
13	1946	94.8	2307	3	US-09-263-933-2
14	1946	94.8	2307	4	US-09-919-901-2
15	1946	94.8	2307	4	US-10-191-966-2
16	1944	94.7	3010	4	US-09-539-601-33
17	1943	94.6	1692	3	US-09-263-933-11
18	1943	94.6	1692	4	US-09-919-901-11
19	1943	94.6	1692	4	US-10-191-966-11
20	1943	94.6	2307	3	US-09-263-933-9
21	1943	94.6	2307	4	US-09-919-901-9
22	1943	94.6	2307	4	US-10-191-966-9
23	1934	94.2	1692	3	US-09-263-933-18
24	1934	94.2	1692	4	US-09-919-901-18
25	1934	94.2	1692	4	US-10-191-966-18
26	1934	94.2	2307	3	US-09-263-933-16
27	1934	94.2	2307	4	US-09-919-901-16

28	1934	94.2	2307	4	US-10-191-966-16	Sequence 16, Appl
29	1928	93.9	3010	3	US-09-014-416-3	Sequence 3, Appl
30	1888	92.0	2013	1	US-08-324-977-12	Sequence 12, Appl
31	1888	92.0	2013	2	US-08-384-616-12	Sequence 12, Appl
32	1888	92.0	2013	2	US-08-904-686A-12	Sequence 12, Appl
33	1888	92.0	2013	3	US-09-315-850-12	Sequence 12, Appl
34	1888	92.0	2201	3	US-08-952-981A-2	Sequence 2, Appl
35	1888	92.0	2620	1	US-08-324-977-32	Sequence 32, Appl
36	1888	92.0	2620	2	US-08-384-616-32	Sequence 32, Appl
37	1888	92.0	2620	2	US-08-904-686A-32	Sequence 32, Appl
38	1888	92.0	2620	3	US-09-315-850-32	Sequence 32, Appl
39	1888	92.0	2621	1	US-08-324-977-36	Sequence 36, Appl
40	1888	92.0	2621	2	US-08-384-616-36	Sequence 36, Appl
41	1888	92.0	2621	3	US-09-315-850-36	Sequence 36, Appl
42	1888	92.0	3010	1	US-08-324-977-2	Sequence 2, Appl
43	1888	92.0	3010	1	US-08-324-977-14	Sequence 14, Appl
44	1888	92.0	3010	2	US-08-384-616-2	Sequence 2, Appl
45	1888	92.0	3010	2	US-08-384-616-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-10-017-736C-11
; Sequence 11, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarie, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO. 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11

Query Match	100.0%;	Score	2053;	DB	4;	Length	393;
Best Local Similarity	100.0%;	Pred. No.	4.8e-198;				
Matches	393;	Conservative	0;	Mismatches	0;	Indels	0;
Gaps	0;						
Qy	1	MAASCGGAVFIGLALLTSPYKVLARLIWVLQYLITRVEAHQVMTPLNVRGRDAI	60				
Db	1	MAASCGGAVFIGLALLTSPYKVLARLIWVLQYLITRVEAHQVMTPLNVRGRDAI	60				
Qy	61	ILLTCAVHPELIDITKLLALFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY	120				
Db	61	ILLTCAVHPELIDITKLLALFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY	120				
Qy	121	VQAFMKLAALTGTYYVDHLTPIQDWAHAGLRDLAVAVEPFIQSDMEVKIITWGADTAAC	180				
Db	121	VQAFMKLAALTGTYYVDHLTPIQDWAHAGLRDLAVAVEPFIQSDMEVKIITWGADTAAC	180				
Qy	181	GDIISGLPVSARGREILLGPADNFEGQGRLLAPITAYSQOTRGLGCIITSLTGRDN	240				
Db	181	GDIISGLPVSARGREILLGPADNFEGQGRLLAPITAYSQOTRGLGCIITSLTGRDN	240				
Qy	241	QVEGEVQVSTATQSFATCVNGVCWTVFHCAGSKTLAGPKGPTQMTYNVDQLVGHQA	300				
Db	241	QVEGEVQVSTATQSFATCVNGVCWTVFHCAGSKTLAGPKGPTQMTYNVDQLVGHQA	300				
Qy	301	PPGARSMTPTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVLKGSSGGLPCPS	360				
Db	301	PPGARSMTPTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVLKGSSGGLPCPS	360				

Db 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSS 360
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
RESULT 2
US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match 100.0%; Score 2053; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 5.1e-198;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MAASCGGAVFIGLALLTLSPYKVLARLIWVLOYLITRVEAHLQVWIPPLNVRGGRDAI 60
Db 5 MAASCGGAVFIGLALLTLSPYKVLARLIWVLOYLITRVEAHLQVWIPPLNVRGGRDAI 64
Qy 61 ILLTCAVHPELIFDITKLLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 65 ILLTCAVHPELIFDITKLLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 124
Qy 121 VQAFMKLAALTGYVYDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITWGADTAAC 180
Db 125 VQAFMKLAALTGYVYDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITWGADTAAC 184
Qy 181 GDIISGLPVSARRGRIILLGPADNPEGQWRLAPITAYSQOTRGLLGCIITSLTGRDKN 240
Db 185 GDIISGLPVSARRGRIILLGPADNPEGQWRLAPITAYSQOTRGLLGCIITSLTGRDKN 244
Qy 241 QVEGEVQVSTATQSFLATCVNGVCWTVFHGAGSKTLGPKGPITQMTYTNVDQLVGVQ 300
Db 245 QVEGEVQVSTATQSFLATCVNGVCWTVFHGAGSKTLGPKGPITQMTYTNVDQLVGVQ 304
Qy 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSS 360
Db 305 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSS 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 3
US-10-017-736C-12
; Sequence 12, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-12

Query Match 96.8%; Score 1987; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 2e-191;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 14 ALLTSLSPYKVLARLIWVLOYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIF 73
Db 1 ALLTSLSPYKVLARLIWVLOYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIF 60
Qy 74 DITKLLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQAFMKLAALTG 133
Db 61 DITKLLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQAFMKLAALTG 120
Qy 134 TYVYDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITWGADTAACGDIISGLPVSARR 193
Db 121 TYVYDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIITWGADTAACGDIISGLPVSARR 180
Qy 194 GREILLGPADNPEGQWRLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 253
Db 181 GREILLGPADNPEGQWRLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 240
Qy 254 QSFLATCVNGVCWTVFHGAGSKTLGPKGPITQMTYTNVDQLVGVQAPPGARSMPTCTCG 313
Db 241 QSFLATCVNGVCWTVFHGAGSKTLGPKGPITQMTYTNVDQLVGVQAPPGARSMPTCTCG 300
Qy 314 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSSHAVGIFRAAVCT 373
Db 301 SSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSGGPILLCPSSHAVGIFRAAVCT 360
Qy 374 RGVAKAVDFIPVESMETTMR 393
Db 361 RGVAKAVDFIPVESMETTMR 380

RESULT 4
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match 95.0%; Score 1951; DB 4; Length 2201;
Best Local Similarity 93.1%; Pred. No. 1.2e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;
Qy 1 MAASCGGAVFIGLALLTLSPYKVLARLIWVLOYLITRVEAHLQVWIPPLNVRGGRDAI 60

Db 5 MAASCAGVAVFGLILLTLLSPHYKULFLARLIWMLQYFITRAEHLQVMTPLNVRGGRDAV 64
Qy 61 ILLTCAVHPELIDITIKLLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 65 ILLTCAIHPELIFITIKLLAILGPLMVLQAGITKVPYFVRAHGLIRACMLVRKVAGHY 124
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC 180
Db 125 VQALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVIFSDMETKVITWGADTAAC 184
Qy 181 GDIISGLPVSAARRREILLGPADNFEQGWLLAPITAYSQOTRGLLCIITSLTGRDKN 240
Db 185 GDIILGLPVSAARRREIHLGPADNFEQGWLLAPITAYSQOTRGLLCIITSLTGRDKN 244
Qy 241 QVEGEVQVSTATQSFATCNGVCWTVFVHAGSKTLGPKGPITQMTYTNVDQDLVQWQA 300
Db 245 QVEGEVQVSTATQSFATCNGVCWTVFVHAGSKTLGPKGPITQMTYTNVDQDLVQWQA 304
Qy 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGRSGLLSPPRVSVYKSGSGGPLLCP 360
Db 305 PPGARSLTPTCTCGSSDLYLVTRHADVIPVRRRGRSGLLSPPRVSVYKSGSGGPLLCP 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 5

US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PRP
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match 95.0%; Score 1951; DB 4; Length 2201;
Best Local Similarity 93.1%; Pred. No. 1.2e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

Qy 1 MAASCAGVAVFGLILLTLLSPHYKULFLARLIWMLQYFITRAEHLQVMTPLNVRGGRDAI 60
Db 5 MAASCAGVAVFGLILLTLLSPHYKULFLARLIWMLQYFITRAEHLQVMTPLNVRGGRDAV 64
Qy 61 ILLTCAVHPELIDITIKLLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 65 ILLTCAIHPELIFITIKLLAILGPLMVLQAGITKVPYFVRAHGLIRACMLVRKVAGHY 124
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC 180
Db 125 VQALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVIFSDMETKVITWGADTAAC 184
Qy 181 GDIISGLPVSAARRREILLGPADNFEQGWLLAPITAYSQOTRGLLCIITSLTGRDKN 240
Db 185 GDIILGLPVSAARRREIHLGPADNFEQGWLLAPITAYSQOTRGLLCIITSLTGRDKN 244
Qy 241 QVEGEVQVSTATQSFATCNGVCWTVFVHAGSKTLGPKGPITQMTYTNVDQDLVQWQA 300
Db 245 QVEGEVQVSTATQSFATCNGVCWTVFVHAGSKTLGPKGPITQMTYTNVDQDLVQWQA 304
Qy 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGRSGLLSPPRVSVYKSGSGGPLLCP 360
Db 305 PPGARSLTPTCTCGSSDLYLVTRHADVIPVRRRGRSGLLSPPRVSVYKSGSGGPLLCP 364

Db 305 PPGARSLTPTCTCGSSDLYLVTRHADVIPVRRRGRSGLLSPPRVSVYKSGSGGPLLCP 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 6

US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRP
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match 95.0%; Score 1951; DB 4; Length 2201;
Best Local Similarity 93.1%; Pred. No. 1.2e-186;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

Qy 1 MAASCAGVAVFGLILLTLLSPHYKULFLARLIWMLQYFITRAEHLQVMTPLNVRGGRDAI 60
Db 5 MAASCAGVAVFGLILLTLLSPHYKULFLARLIWMLQYFITRAEHLQVMTPLNVRGGRDAV 64
Qy 61 ILLTCAVHPELIDITIKLLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 65 ILLTCAIHPELIFITIKLLAILGPLMVLQAGITKVPYFVRAHGLIRACMLVRKVAGHY 124
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC 180
Db 125 VQALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPVIFSDMETKVITWGADTAAC 184
Qy 181 GDIISGLPVSAARRREILLGPADNFEQGWLLAPITAYSQOTRGLLCIITSLTGRDKN 240
Db 185 GDIILGLPVSAARRREIHLGPADNFEQGWLLAPITAYSQOTRGLLCIITSLTGRDKN 244
Qy 241 QVEGEVQVSTATQSFATCNGVCWTVFVHAGSKTLGPKGPITQMTYTNVDQDLVQWQA 300
Db 245 QVEGEVQVSTATQSFATCNGVCWTVFVHAGSKTLGPKGPITQMTYTNVDQDLVQWQA 304
Qy 301 PPGARSMPTCTCGSSDLYLVTRHADVIPVRRRGRSGLLSPPRVSVYKSGSGGPLLCP 360
Db 305 PPGARSLTPTCTCGSSDLYLVTRHADVIPVRRRGRSGLLSPPRVSVYKSGSGGPLLCP 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 7

US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343

QY	1	MAASCGGAVFIGLALLTLSPYKVLARLIWMLOYLITRVEAHLQVWIPPLNVGGRDAI	60
DB	814	MAASCGGAVFVGLILLTLSPHYKFLARLIWMLOYFITRAEHLQVWIPPLNVGGRDAV	873
QY	61	ILLTCAVHPELIFDITKLLAI FGLPMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHY	120
DB	874	ILLTCAIHPELIFTITKLLAILGLPMVLOAGITKVPYFVRAHGLIRACMLVRKVAGHY	933
QY	121	VQMAFMKLAALTGTYYVDHLLTPLQDWAHAGRLDLAVAVEPVIFSDMEVKIITWGADTAAC	180
DB	934	VQWALMKLAALTGTYYVDHLLTPLRDWAHAGRLDLAVAVEPVIFSDMETKITWTGADTAAC	993
QY	181	GDIISGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQOTRGLLGCIITSLTGRDKN	240
DB	994	GDIILGLPVSARRGREIHLGPADSLGOGWRLLAPITAYSQOTRGLLGCIITSLTGRDRN	1053
QY	241	QVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA	300
DB	1054	QVEGEVQVSTATQSFATCVNGVCWTVYHAGSKTLAGPKGPITQMTYTNVDQDLVGWQA	1113
QY	301	PGARSMTPTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPILCPS	360
DB	1114	PGARSLTPTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPILCPS	1173
QY	361	GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	393
DB	1174	GHAVGIFRAAVCTRGVAKAVDFVPVESMETTMR	1206
RESULT 9			
US-09-539-601-27			
; Sequence 27, Application US/09539601C			
; Patent No. 6630343			
; GENERAL INFORMATION:			
; APPLICANT: Bartenschlager, Ralf FW			
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System			
; FILE REFERENCE: all sequences			
; CURRENT APPLICATION NUMBER: US/09/539,601C			
; CURRENT FILING DATE: 2001-08-30			
; EARLIER FILING DATE: 2001-08-30			
; EARLIER FILING DATE: 1999-04-03			
; NUMBER OF SEQ ID NOS: 51			
; SOFTWARE: PatentIn Ver. 2.1			
; SEQ ID NO 27			
; LENGTH: 3010			
; TYPE: PRT			
; ORGANISM: Hepatitis C virus			
US-09-539-601-27			
Query Match 95.0%; Score 1951; DB 4; Length 3010;			
Best Local Similarity 93.1%; Pred. No. 1.9e-186;			
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;			
QY	1	MAASCGGAVFIGLALLTLSPYKVLARLIWMLOYLITRVEAHLQVWIPPLNVGGRDAI	60
DB	814	MAASCGGAVFVGLILLTLSPHYKFLARLIWMLOYFITRAEHLQVWIPPLNVGGRDAV	873
QY	61	ILLTCAVHPELIFDITKLLAI FGLPMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHY	120
DB	874	ILLTCAIHPELIFTITKLLAILGLPMVLOAGITKVPYFVRAHGLIRACMLVRKVAGHY	933
QY	121	VQMAFMKLAALTGTYYVDHLLTPLQDWAHAGRLDLAVAVEPVIFSDMEVKIITWGADTAAC	180
DB	934	VQWALMKLAALTGTYYVDHLLTPLRDWAHAGRLDLAVAVEPVIFSDMETKITWTGADTAAC	993
QY	181	GDIISGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQOTRGLLGCIITSLTGRDKN	240
DB	994	GDIILGLPVSARRGREIHLGPADSLGOGWRLLAPITAYSQOTRGLLGCIITSLTGRDRN	1053
QY	241	QVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA	300
DB	1054	QVEGEVQVSTATQSFATCVNGVCWTVYHAGSKTLAGPKGPITQMTYTNVDQDLVGWQA	1113
QY	301	PGARSMTPTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPILCPS	360
DB	1114	PGARSLTPTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPILCPS	1173
QY	361	GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	393
DB	1174	GHAVGIFRAAVCTRGVAKAVDFVPVESMETTMR	1206
RESULT 8			
US-09-539-601-21			
; Sequence 21, Application US/09539601C			
; Patent No. 6630343			
; GENERAL INFORMATION:			
; APPLICANT: Bartenschlager, Ralf FW			
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System			
; FILE REFERENCE: all sequences			
; CURRENT APPLICATION NUMBER: US/09/539,601C			
; CURRENT FILING DATE: 2001-08-30			
; EARLIER FILING DATE: 2001-08-30			
; EARLIER FILING DATE: 1999-04-03			
; NUMBER OF SEQ ID NOS: 51			
; SOFTWARE: PatentIn Ver. 2.1			
; SEQ ID NO 21			
; LENGTH: 3010			
; TYPE: PRT			
; ORGANISM: Hepatitis C virus			
US-09-539-601-21			
Query Match 95.0%; Score 1951; DB 4; Length 3010;			
Best Local Similarity 93.1%; Pred. No. 1.9e-186;			
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;			
QY	1	MAASCGGAVFIGLALLTLSPYKVLARLIWMLOYLITRVEAHLQVWIPPLNVGGRDAI	60
DB	814	MAASCGGAVFVGLILLTLSPHYKFLARLIWMLOYFITRAEHLQVWIPPLNVGGRDAV	873
QY	61	ILLTCAVHPELIFDITKLLAI FGLPMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHY	120
DB	874	ILLTCAIHPELIFTITKLLAILGLPMVLOAGITKVPYFVRAHGLIRACMLVRKVAGHY	933
QY	121	VQMAFMKLAALTGTYYVDHLLTPLQDWAHAGRLDLAVAVEPVIFSDMEVKIITWGADTAAC	180
DB	934	VQWALMKLAALTGTYYVDHLLTPLRDWAHAGRLDLAVAVEPVIFSDMETKITWTGADTAAC	993
QY	181	GDIISGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQOTRGLLGCIITSLTGRDKN	240
DB	994	GDIILGLPVSARRGREIHLGPADSLGOGWRLLAPITAYSQOTRGLLGCIITSLTGRDRN	1053
QY	241	QVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMTYTNVDQDLVGWQA	300
DB	1054	QVEGEVQVSTATQSFATCVNGVCWTVYHAGSKTLAGPKGPITQMTYTNVDQDLVGWQA	1113
QY	301	PGARSMTPTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPILCPS	360
DB	1114	PGARSLTPTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPILCPS	1173
QY	361	GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	393
DB	1174	GHAVGIFRAAVCTRGVAKAVDFVPVESMETTMR	1206
RESULT 8			
US-09-539-601-21			
; Sequence 21, Application US/09539601C			
; Patent No. 6630343			
; GENERAL INFORMATION:			
; APPLICANT: Bartenschlager, Ralf FW			
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System			
; FILE REFERENCE: all sequences			
; CURRENT APPLICATION NUMBER: US/09/539,601C			
; CURRENT FILING DATE: 2001-08-30			
; EARLIER FILING DATE: 2001-08-30			
; EARLIER FILING DATE: 1999-04-03			
; NUMBER OF SEQ ID NOS: 51			
; SOFTWARE: PatentIn Ver. 2.1			
; SEQ ID NO 21			
; LENGTH: 3010			


```
Qy 301 PPGARSTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGLLCP 360
Db 1114 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGLLCP 1173
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 1174 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 10
US-09-263-933-4
; Sequence 4, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: 09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
US-09-263-933-4

Query Match 94.8%; Score 1946; DB 3; Length 1692;
Best Local Similarity 92.9%; Pred. No. 2.5e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFTGLALLTLSPYKVLARLIWVLOYLITRVEAHLQVWIPPLNVRGGRDAI 60
Db 93 MAASCGGAVFVGLVLLTLSPYKVFARLIWVLOYLITRVEAHLQVWIPPLNVRGGRDAI 152
Qy 61 ILLTCAVHPELIFDITKLLAILFGLMVLOAGITKVPFVRAQGLIRACMLVRKAAGHY 120
Db 153 ILLMCAVHPELIFDITKLLAILFGLMVLOAGITRVPFVRAQGLIHACMLVRKVAGHY 212
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVPFSDMEVKIITWGADTAAC 180
Db 213 VQAFMKLGALTGTYYINHLTPLRDWAHAGLRDLAVAVEPVPFSDMETKIITWGADTAAC 272
Qy 181 GDIISGLPVSARRREILLGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKN 240
Db 273 GDIITGLPVSARRKEILLGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKN 332
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPKGPIITOMYTNVDQDLVGQQA 300
Db 333 QVEGEVQVSTATOSFLATCNGVCWTVYHAGSKTLGPKGPIITOMYTNVDQDLVGQQA 392
Qy 301 PPGARSTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGLLCP 360
Db 393 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGLLCP 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 11
US-09-919-901-4
; Sequence 4, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
```

```
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; PRIOR FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4

Query Match 94.8%; Score 1946; DB 4; Length 1692;
Best Local Similarity 92.9%; Pred. No. 2.5e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFTGLALLTLSPYKVLARLIWVLOYLITRVEAHLQVWIPPLNVRGGRDAI 60
Db 93 MAASCGGAVFVGLVLLTLSPYKVFARLIWVLOYLITRVEAHLQVWIPPLNVRGGRDAI 152
Qy 61 ILLTCAVHPELIFDITKLLAILFGLMVLOAGITKVPFVRAQGLIRACMLVRKAAGHY 120
Db 153 ILLMCAVHPELIFDITKLLAILFGLMVLOAGITRVPFVRAQGLIHACMLVRKVAGHY 212
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVPFSDMEVKIITWGADTAAC 180
Db 213 VQAFMKLGALTGTYYINHLTPLRDWAHAGLRDLAVAVEPVPFSDMETKIITWGADTAAC 272
Qy 181 GDIISGLPVSARRREILLGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKN 240
Db 273 GDIITGLPVSARRKEILLGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKN 332
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPKGPIITOMYTNVDQDLVGQQA 300
Db 333 QVEGEVQVSTATOSFLATCNGVCWTVYHAGSKTLGPKGPIITOMYTNVDQDLVGQQA 392
Qy 301 PPGARSTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGLLCP 360
Db 393 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKGSSGGLLCP 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 12
US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
```

```
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-191-966-4

Query Match          94.8%; Score 1946; DB 4; Length 1692;
Best Local Similarity 92.9%; Pred. No. 2.5e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFTGLALLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 60
Db 93 MAASCGGAVFGLVLLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 152
Qy 61 ILLCAVHPELIFDITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 153 ILLCAVHPELIFDITKLLAIFGLPMVLQAGITRVPYFVRAOGLIRACMLVRKAAGHY 212
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAAC 180
Db 213 VQAFMKLGALTGTYYINHLTPLRDWAHAGLRDLAVAVEPVFSDMETKIITWGADTAAC 272
Qy 181 GDIISGLPVSARRGRIILLGPADNFEQGWRLLIAPITAYSQOTRGLLGCIITSITGRDKN 240
Db 273 GDIILGLPVSARRGRIILLGPADNFEQGWRLLIAPITAYSQOTRGLLGCIITSITGRDKN 332
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFVGAGSKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 333 QVEGEVQVSTATOSFLATCNGVCWTVFVGAGSKTLGPKGPITQMTYTNVDQDLVGWQA 392
Qy 301 PPGARSTPTCTCGSSDLVLRHADVIPVRRRGDSRGLSPRVSVYLGSSGGPLLCPSS 360
Db 393 PPGARSLTPTCTCGSSDLVLRHADVIPVRRRGDSRGLSPRVSVYLGSSGGPLLCPSS 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 13
US-09-263-933-2
; Sequence 2, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-263-933-2

Query Match          94.8%; Score 1946; DB 3; Length 2307;
Best Local Similarity 92.9%; Pred. No. 4e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFTGLALLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 60
Db 195 MAASCGGAVFGLVLLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 244
Qy 61 ILLCAVHPELIFDITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 245 ILLCAVHPELIFDITKLLAIFGLPMVLQAGITRVPYFVRAOGLIRACMLVRKAAGHY 304

RESULT 14
US-09-919-901-2
; Sequence 2, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-2

Query Match          94.8%; Score 1946; DB 4; Length 2307;
Best Local Similarity 92.9%; Pred. No. 4e-186;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFTGLALLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 60
Db 185 MAASCGGAVFGLVLLTLSPYKVLARLIWVLYLITRVEAHQVWIPPLNVRGRDAI 244
Qy 61 ILLCAVHPELIFDITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 245 ILLCAVHPELIFDITKLLAIFGLPMVLQAGITRVPYFVRAOGLIRACMLVRKAAGHY 304
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAAC 180
Db 305 VQAFMKLGALTGTYYINHLTPLRDWAHAGLRDLAVAVEPVFSDMETKIITWGADTAAC 364
Qy 181 GDIISGLPVSARRGRIILLGPADNFEQGWRLLIAPITAYSQOTRGLLGCIITSITGRDKN 240
Db 365 GDIILGLPVSARRGRIILLGPADNFEQGWRLLIAPITAYSQOTRGLLGCIITSITGRDKN 424
Qy 241 QVEGEVQVSTATOSFLATCNGVCWTVFVGAGSKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 425 QVEGEVQVSTATOSFLATCNGVCWTVFVGAGSKTLGPKGPITQMTYTNVDQDLVGWQA 484
```


This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 68.4263 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-11

Perfect score: 2053

Sequence: 1 MAASCGGAVFIGLALLTLSP.....RGVAKAVDFIPVSMETMR 393

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications AA:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	ID	Description
1	2053	100.0	393	13	US-10-017-736-11
2	2053	100.0	393	15	US-10-650-585-11
3	2053	100.0	409	13	US-10-017-736-2
4	2053	100.0	409	15	US-10-650-585-2
5	1987	96.8	380	13	US-10-017-736-12
6	1987	96.8	380	15	US-10-650-585-12
7	1951	95.0	2201	13	US-10-029-907-3
8	1951	95.0	2201	14	US-10-309-561-3
9	1951	95.0	2201	16	US-10-789-355-3
10	1951	95.0	3010	15	US-10-467-000-1
11	1946	94.8	1692	10	US-09-919-901-4
12	1946	94.8	1692	14	US-10-191-966-4
13	1946	94.8	2307	10	US-09-919-901-2

14	1946	94.8	2307	14	US-10-191-966-2	Sequence 2, Appli
15	1943	94.6	1692	10	US-09-919-901-11	Sequence 11, Appl
16	1943	94.6	1692	14	US-10-191-966-11	Sequence 11, Appl
17	1943	94.6	2307	10	US-09-919-901-9	Sequence 9, Appli
18	1943	94.6	2307	14	US-10-191-966-9	Sequence 9, Appli
19	1934	94.2	1692	10	US-09-919-901-18	Sequence 18, Appl
20	1934	94.2	1692	14	US-10-191-966-18	Sequence 18, Appl
21	1934	94.2	2307	10	US-09-919-901-16	Sequence 16, Appl
22	1934	94.2	2307	14	US-10-191-966-16	Sequence 16, Appl
23	1929	94.0	3010	16	US-10-333-449A-34	Sequence 34, Appl
24	1888	92.0	2201	13	US-10-085-476-2	Sequence 2, Appli
25	1842	89.7	352	13	US-10-017-736-13	Sequence 13, Appl
26	1842	89.7	352	15	US-10-650-585-13	Sequence 13, Appl
27	1778	86.6	341	13	US-10-017-736-14	Sequence 14, Appl
28	1778	86.6	341	15	US-10-650-585-14	Sequence 14, Appl
29	1772	86.3	2985	14	US-10-259-275-40	Sequence 40, Appl
30	1766	86.0	3011	9	US-09-742-659-4	Sequence 4, Appli
31	1766	86.0	3011	10	US-09-891-894-3	Sequence 3, Appli
32	1766	86.0	3011	14	US-10-184-150-3	Sequence 3, Appli
33	1766	86.0	3011	15	US-10-328-997-3	Sequence 3, Appli
34	1766	86.0	3012	9	US-09-238-076-2	Sequence 2, Appli
35	1766	86.0	3012	10	US-09-995-937-2	Sequence 2, Appli
36	1766	86.0	3012	10	US-09-917-563-2	Sequence 2, Appli
37	1764	85.9	3011	9	US-09-916-359-2	Sequence 2, Appli
38	1764	85.9	3011	15	US-10-296-734-406	Sequence 406, App
39	1764	85.9	3011	16	US-10-445-724-2	Sequence 2, Appli
40	1762	85.8	3011	9	US-09-238-076-20	Sequence 20, Appl
41	1762	85.8	3011	10	US-09-995-937-20	Sequence 20, Appl
42	1762	85.8	3011	10	US-09-917-563-20	Sequence 20, Appl
43	1759	85.7	2894	9	US-09-941-611-23	Sequence 23, Appl
44	1759	85.7	2894	14	US-10-044-995-23	Sequence 23, Appl
45	1759	85.7	2894	16	US-10-822-871-23	Sequence 23, Appl

ALIGNMENTS

RESULT 1
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

Query Match 100.0%; Score 2053; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 7.7e-190;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MAASCGGAVFIGLALLTLSPYKYLARLIWVQLYITRVEAHLQVWIPPLNVRGRDAI 60
Db 1 MAASCGGAVFIGLALLTLSPYKYLARLIWVQLYITRVEAHLQVWIPPLNVRGRDAI 60
Qy 61 ILLTCAVHPELIPIITKLLAI FGLIMVQLNGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Db 61 ILLTCAVHPELIPIITKLLAI FGLIMVQLNGITKVPYFVRAOGLIRACMLVRKAAGHY 120
Qy 121 VQAFMKLAALTGYVYDHLTPTLDWAHAGLRDLAVAVPEVIFSDMEVKIITWGADTAAC 180
Db 121 VQAFMKLAALTGYVYDHLTPTLDWAHAGLRDLAVAVPEVIFSDMEVKIITWGADTAAC 180

```
Qy 181 GDIISGLPVSARRGREILLGPADNFEQGGWLLAPITAYSQOTRGLGCIITSLTGRDKN 240
Db 181 GDIISGLPVSARRGREILLGPADNFEQGGWLLAPITAYSQOTRGLGCIITSLTGRDKN 240
Qy 241 QVEGEVQVSTATQSFATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNTVNDQDLVGWQA 300
Db 241 QVEGEVQVSTATQSFATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNTVNDQDLVGWQA 300
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILLCPS 360
Db 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILLCPS 360
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
```

RESULT 2

```
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11
```

```
Query Match 100.0%; Score 2053; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 7,7e-190;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 MAASCGGAVFIGLALLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGDAI 60
Db 1 MAASCGGAVFIGLALLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGDAI 60
Qy 61 ILLTCAVHPELIFDITKLLAIFGPLMVLAQITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 61 ILLTCAVHPELIFDITKLLAIFGPLMVLAQITKVPYFVRAQGLIRACMLVRKAAGHY 120
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPFIQSDMEVKIITWADTAAC 180
Db 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPFIQSDMEVKIITWADTAAC 180
Qy 181 GDIISGLPVSARRGREILLGPADNFEQGGWLLAPITAYSQOTRGLGCIITSLTGRDKN 240
Db 181 GDIISGLPVSARRGREILLGPADNFEQGGWLLAPITAYSQOTRGLGCIITSLTGRDKN 240
Qy 241 QVEGEVQVSTATQSFATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNTVNDQDLVGWQA 300
Db 241 QVEGEVQVSTATQSFATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNTVNDQDLVGWQA 300
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILLCPS 360
Db 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILLCPS 360
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
```

RESULT 3

```
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2
```

```
Query Match 100.0%; Score 2053; DB 13; Length 409;
Best Local Similarity 100.0%; Pred. No. 8.1e-190;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MAASCGGAVFIGLALLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGDAI 60
Db 5 MAASCGGAVFIGLALLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGGDAI 64
Qy 61 ILLTCAVHPELIFDITKLLAIFGPLMVLAQITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 65 ILLTCAVHPELIFDITKLLAIFGPLMVLAQITKVPYFVRAQGLIRACMLVRKAAGHY 124
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPFIQSDMEVKIITWADTAAC 180
Db 125 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAVEPFIQSDMEVKIITWADTAAC 184
Qy 181 GDIISGLPVSARRGREILLGPADNFEQGGWLLAPITAYSQOTRGLGCIITSLTGRDKN 240
Db 185 GDIISGLPVSARRGREILLGPADNFEQGGWLLAPITAYSQOTRGLGCIITSLTGRDKN 244
Qy 241 QVEGEVQVSTATQSFATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNTVNDQDLVGWQA 300
Db 245 QVEGEVQVSTATQSFATCNGVCWTVFHHAGSKTLAGPKGPTQMTYNTVNDQDLVGWQA 304
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILLCPS 360
Db 305 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYLGSSGGPILLCPS 364
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397
```

RESULT 4

```
US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-2
```

Query Match 100.0%; Score 2053; DB 15; Length 409;
Best Local Similarity 100.0%; Pred. No. 8.1e-190;
Matches 393; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MAASCCGAVFVIGLALLTSPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAI 60
DB 5 MAASCCGAVFVIGLALLTSPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAI 64
QY 61 ILLTCAVHPELIDITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
DB 65 ILLTCAVHPELIDITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHY 124
QY 121 VQAFMKLAALTCTYYVDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC 180
DB 125 VQAFMKLAALTCTYYVDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC 184
QY 181 GDIISGLPVARSREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKN 240
DB 185 GDIISGLPVARSREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKN 244
QY 241 QVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLGPKGPIITQMTNVDDQLVGMQA 300
DB 245 QVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLGPKGPIITQMTNVDDQLVGMQA 304
QY 301 PPGARSMPTCTGSSDLYLVTRHADVIPIVRRRGDSRGLSPRPVSYLKSGSGGPLLCPS 360
DB 305 PPGARSMPTCTGSSDLYLVTRHADVIPIVRRRGDSRGLSPRPVSYLKSGSGGPLLCPS 364
QY 361 CHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
DB 365 CHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 5

US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017, 736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

Query Match 96.8%; Score 1987; DB 13; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.8e-183;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 14 ALLTSPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPELIF 73
DB 1 ALLTSPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPELIF 60
QY 74 DITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQAFMKLAALTG 133
DB 61 DITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQAFMKLAALTG 120
QY 134 TYVYDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARS 193
DB 121 TYVYDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARS 180
QY 194 GREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTAT 253
DB 181 GREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTAT 240
QY 254 QSFATCVNGVCTVPHGAGSKTLGPKGPIITQMTNVDDQLVGMQAAPPGARSMPTCTCG 313
DB 241 QSFATCVNGVCTVPHGAGSKTLGPKGPIITQMTNVDDQLVGMQAAPPGARSMPTCTCG 300
QY 314 SSDLYLVTRHADVIPIVRRRGDSRGLSPRPVSYLKSGSGGPLLCPSGHAVGIFRAAVCT 373
DB 301 SSDLYLVTRHADVIPIVRRRGDSRGLSPRPVSYLKSGSGGPLLCPSGHAVGIFRAAVCT 360
QY 374 RGVAKAVDFIPVESMETTMR 393
DB 361 RGVAKAVDFIPVESMETTMR 380

RESULT 7

US-10-029-907-3
; Sequence 3, Application US/10029907
; Publication No. US20020142350A1

QY 254 QSFATCVNGVCTVPHGAGSKTLGPKGPIITQMTNVDDQLVGMQAAPPGARSMPTCTCG 313
DB 241 QSFATCVNGVCTVPHGAGSKTLGPKGPIITQMTNVDDQLVGMQAAPPGARSMPTCTCG 300
QY 314 SSDLYLVTRHADVIPIVRRRGDSRGLSPRPVSYLKSGSGGPLLCPSGHAVGIFRAAVCT 373
DB 301 SSDLYLVTRHADVIPIVRRRGDSRGLSPRPVSYLKSGSGGPLLCPSGHAVGIFRAAVCT 360
QY 374 RGVAKAVDFIPVESMETTMR 393
DB 361 RGVAKAVDFIPVESMETTMR 380

RESULT 6

US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US2004007066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650, 585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017, 736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

Query Match 96.8%; Score 1987; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.8e-183;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 14 ALLTSPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPELIF 73
DB 1 ALLTSPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPELIF 60
QY 74 DITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQAFMKLAALTG 133
DB 61 DITKLLAIFGLPLMVLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQAFMKLAALTG 120
QY 134 TYVYDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARS 193
DB 121 TYVYDHLTLPQDWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVARS 180
QY 194 GREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTAT 253
DB 181 GREILLGPADNFGQWRLLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVSTAT 240
QY 254 QSFATCVNGVCTVPHGAGSKTLGPKGPIITQMTNVDDQLVGMQAAPPGARSMPTCTCG 313
DB 241 QSFATCVNGVCTVPHGAGSKTLGPKGPIITQMTNVDDQLVGMQAAPPGARSMPTCTCG 300
QY 314 SSDLYLVTRHADVIPIVRRRGDSRGLSPRPVSYLKSGSGGPLLCPSGHAVGIFRAAVCT 373
DB 301 SSDLYLVTRHADVIPIVRRRGDSRGLSPRPVSYLKSGSGGPLLCPSGHAVGIFRAAVCT 360
QY 374 RGVAKAVDFIPVESMETTMR 393
DB 361 RGVAKAVDFIPVESMETTMR 380


```
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-789-355-3

Query Match      95.0%; Score 1951; DB 16; Length 2201;
Best Local Similarity 93.1%; Pred. No. 5.9e-179;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALLTLSPYKVLRLIWLQYLITRVEAHLQVWIPPLNVRGGDAI 60
DB 5 MAASCGGAVFGLILLTLSPYKFLARLLIWLQYFITRAEHLQVWIPPLNVRGGDAV 64
QY 61 ILTCAVHPELIFDITKLLLAIFGLPLMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
DB 65 ILTCAIHPELIFITIKLLAILGLPLMVLOAGITKVPYFVRAHGLIRACMLVRKAGHY 124
QY 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGDATTAAC 180
DB 125 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVFSDMETKVIITWGDATTAAC 184
QY 181 GDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKN 240
DB 185 GDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDRN 244
QY 241 QVEGEVQVSTATOSFLATCNGVCTVFFHAGSKTLGAGPKGPIITOMYTNVDQDLVGWQA 300
DB 245 QVEGEVQVSTATOSFLATCNGVCTVFFHAGSKTLGAGPKGPIITOMYTNVDQDLVGWQA 304
QY 301 PPGARMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLPLCPS 360
DB 305 PPGARSLTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLPLCPS 364
QY 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
DB 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 10
US-10-467-000-1
; Sequence 1, Application US/10467000
; Publication No. US20040067486A1
; GENERAL INFORMATION:
; APPLICANT: De Francesco, Raffaele
; APPLICANT: Migliaccio, Giovanni
; APPLICANT: Paonessa, Giacomo
; TITLE OF INVENTION: HEPATITIS C VIRUS REPLICONS AND REPLICON
; FILE REFERENCE: ITR0003P
; CURRENT APPLICATION NUMBER: US/10/467,000
; PRIOR FILING DATE: 2003-07-21
; PRIOR FILING DATE: PCT/EP02/00526
; PRIOR FILING DATE: 2002-01-16
; PRIOR APPLICATION NUMBER: 60/263,479
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Con 1 HCV isolate nucleic acid
US-10-467-000-1

Query Match      95.0%; Score 1951; DB 15; Length 3010;
Best Local Similarity 93.1%; Pred. No. 8.9e-179;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALLTLSPYKVLRLIWLQYLITRVEAHLQVWIPPLNVRGGDAI 60
DB 814 MAASCGGAVFGLILLTLSPYKFLARLLIWLQYFITRAEHLQVWIPPLNVRGGDAV 873
QY 61 ILTCAVHPELIFDITKLLLAIFGLPLMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHY 120

; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-789-355-3

Query Match      95.0%; Score 1951; DB 16; Length 2201;
Best Local Similarity 93.1%; Pred. No. 5.9e-179;
Matches 366; Conservative 14; Mismatches 13; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALLTLSPYKVLRLIWLQYLITRVEAHLQVWIPPLNVRGGDAI 60
DB 5 MAASCGGAVFGLILLTLSPYKFLARLLIWLQYFITRAEHLQVWIPPLNVRGGDAV 64
QY 61 ILTCAVHPELIFDITKLLLAIFGLPLMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
DB 65 ILTCAIHPELIFITIKLLAILGLPLMVLOAGITKVPYFVRAHGLIRACMLVRKAGHY 124
QY 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGDATTAAC 180
DB 125 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVFSDMETKVIITWGDATTAAC 184
QY 181 GDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKN 240
DB 185 GDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDRN 244
QY 241 QVEGEVQVSTATOSFLATCNGVCTVFFHAGSKTLGAGPKGPIITOMYTNVDQDLVGWQA 300
DB 245 QVEGEVQVSTATOSFLATCNGVCTVFFHAGSKTLGAGPKGPIITOMYTNVDQDLVGWQA 304
QY 301 PPGARMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLPLCPS 360
DB 305 PPGARSLTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGLPLCPS 364
QY 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
DB 365 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 11
US-09-919-901-4
; Sequence 4, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4

Query Match      94.8%; Score 1946; DB 10; Length 1692;
Best Local Similarity 92.9%; Pred. No. 1.3e-178;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

QY 1 MAASCGGAVFIGLALLTLSPYKVLRLIWLQYLITRVEAHLQVWIPPLNVRGGDAI 60
DB 93 MAASCGGAVFGLVLLTLSPYKVLRLIWLQYFITRAEHLHVIWIPPLNARGGRDAI 152
QY 61 ILTCAVHPELIFDITKLLLAIFGLPLMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHY 120
DB 153 ILTCAVHPELIFDITKLLLAIFGLPLMVLOAGITRVPYFVRAOGLIHACMLVRKAGHY 212
QY 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGDATTAAC 180
DB 213 VQAFMKLGALTGTYYINHLTPDRWAHAGLRDLAVAVEPVFSDMETKVIITWGDATTAAC 272
QY 181 GDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKN 240
DB 273 GDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKN 332
QY 241 QVEGEVQVSTATOSFLATCNGVCTVFFHAGSKTLGAGPKGPIITOMYTNVDQDLVGWQA 300
```

Db 333 QVEGEVQVWVSTATQSFATCNGVCWTVYHAGSGKTLGPKGPITQMTYTNVDQDLVGWQA 392
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSVYLGSSGGPILCPs 360
Db 393 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSVYLGSSGGPILCPs 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 12
US-10-191-966-4
; Sequence 4, Application US/10191966
; Publication No. US20030175692A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-10-191-966-4

Query Match 94.8%; Score 1946; DB 14; Length 1692;
Best Local Similarity 92.9%; Pred. No. 1.3e-178;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFGLALLTSLSPYKVLARLIWLVQYITRVEAHLQVWIPPLNVRGGRDAI 60
Db 93 MAASCGGAVFGLVLLTSLSPYKVLARLIWLVQYITRVEAHLQVWIPPLNVRGGRDAI 152
Qy 61 ILLTCAVHPELIFDITKLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 153 ILLMCAVHPELIFDITKLLAIALGLMVLQAGITRVPYFVRAQGLIHACMLVRKVAGHY 212
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDVAVEPVIFSDMEVKIITWGADTAAC 180
Db 213 VQAFMKLGALTGTYYNHLTPLRDWAHAGRLDVAVEPVVFSMETKIITWGADTAAC 272
Qy 181 GDIIISGLPVSAARRGRIILLGPADNFGQWRLAPITAYSQOTRGLLCIITSLTGRDKN 240
Db 273 GDIIISGLPVSAARRGRIILLGPADNFGQWRLAPITAYSQOTRGLLCIITSLTGRDKN 332
Qy 241 QVEGEVQVWVSTATQSFATCNGVCWTVYHAGSGKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 333 QVEGEVQVWVSTATQSFATCNGVCWTVYHAGSGKTLGPKGPITQMTYTNVDQDLVGWQA 392
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSVYLGSSGGPILCPs 360
Db 393 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSVYLGSSGGPILCPs 452
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 453 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 13
US-09-919-901-2

; Sequence 2, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-09-919-901-2

Query Match 94.8%; Score 1946; DB 10; Length 2307;
Best Local Similarity 92.9%; Pred. No. 1.9e-178;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy 1 MAASCGGAVFGLALLTSLSPYKVLARLIWLVQYITRVEAHLQVWIPPLNVRGGRDAI 60
Db 185 MAASCGGAVFGLVLLTSLSPYKVLARLIWLVQYITRVEAHLQVWIPPLNVRGGRDAI 244
Qy 61 ILLTCAVHPELIFDITKLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY 120
Db 245 ILLMCAVHPELIFDITKLLAIALGLMVLQAGITRVPYFVRAQGLIHACMLVRKVAGHY 304
Qy 121 VQAFMKLAALTGTYYVDHLTPLODWAHAGRLDVAVEPVIFSDMEVKIITWGADTAAC 180
Db 305 VQAFMKLGALTGTYYNHLTPLRDWAHAGRLDVAVEPVVFSMETKIITWGADTAAC 364
Qy 181 GDIIISGLPVSAARRGRIILLGPADNFGQWRLAPITAYSQOTRGLLCIITSLTGRDKN 240
Db 365 GDIIISGLPVSAARRGRIILLGPADNFGQWRLAPITAYSQOTRGLLCIITSLTGRDKN 424
Qy 241 QVEGEVQVWVSTATQSFATCNGVCWTVYHAGSGKTLGPKGPITQMTYTNVDQDLVGWQA 300
Db 425 QVEGEVQVWVSTATQSFATCNGVCWTVYHAGSGKTLGPKGPITQMTYTNVDQDLVGWQA 484
Qy 301 PPGARSMTPCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSVYLGSSGGPILCPs 360
Db 485 PPGARSLTPCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSVYLGSSGGPILCPs 544
Qy 361 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
Db 545 GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 577

RESULT 14
US-10-191-966-2
; Sequence 2, Application US/10191966
; Publication No. US20030175692A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR FILING DATE: 1999-03-08

; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-10-191-966-2

Query Match 94.8%; Score 1946; DB 14; Length 2307;
Best Local Similarity 92.9%; Pred. No. 1.9e-178;
Matches 365; Conservative 13; Mismatches 15; Indels 0; Gaps 0;

Qy	1	MAASCGGAVFIGLALLTLSPYKVLARLIWMQVLIIRVEAHQVWIPPLNVRGGRDAI	60
Db	185	MAASCGGAVFVGLVLLTLSPYKVLARLIWMQVLIIRVEAHQVWIPPLNVRGGRDAI	244
Qy	61	ILLTCAVHPELIFDITKLLLAIFGLPMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY	120
Db	245	ILLCAVHPELIFDITKLLLAIFGLPMVLQAGITRVPYFVRAQGLIHACMLVRKVAGHY	304
Qy	121	VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC	180
Db	305	VQAFMKLGALTGTYYIYNHLTPLRDWAHAGLRDLAVAVEPVVFSMETKIITWGADTAAC	364
Qy	181	GDIISGLPVSARRGKILLGPADNPEGOGWLLAPITAYSQOTRGLLCIITSLTGRDKN	240
Db	365	GDIILGLPVSARRGKILLGPADNPEGOGWLLAPITAYSQOTRGLLCIITSLTGRDKN	424
Qy	241	QVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAGPKGITQMTYTNVDQDLVGWQA	300
Db	425	QVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAGPKGITQMTYTNVDQDLVGWQA	484
Qy	301	PPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGLLSPPRVSVYKSGSGGPLLCP	360
Db	485	PPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGLLSPPRVSVYKSGSGGPLLCP	544
Qy	361	GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	393
Db	545	GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	577

RESULT 15

US-09-919-901-11
; Sequence 11, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; PRIOR FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-09-919-901-11

Query Match 94.6%; Score 1943; DB 10; Length 1692;

Best Local Similarity 92.6%; Pred. No. 2.4e-178; Matches 364; Conservative 14; Mismatches 15; Indels 0; Gaps 0;			
Qy	1	MAASCGGAVFIGLALLTLSPYKVLARLIWMQVLIIRVEAHQVWIPPLNVRGGRDAI	60
Db	93	MAASCGGAVFVGLVLLTLSPYKVLARLIWMQVLIIRVEAHQVWIPPLNVRGGRDAI	152
Qy	61	ILLTCAVHPELIFDITKLLLAIFGLPMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHY	120
Db	153	ILLCAVHPELIFDITKLLLAIFGLPMVLQAGITRVPYFVRAQGLIHACMLVRKVAGHY	212
Qy	121	VQAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAAC	180
Db	213	VQAFMKLGALTGTYYIYNHLTPLRDWAHAGLRDLAVAVEPVVFSMETKIITWGADTAAC	272
Qy	181	GDIISGLPVSARRGKILLGPADNPEGOGWLLAPITAYSQOTRGLLCIITSLTGRDKN	240
Db	273	GDIILGLPVSARRGKILLGPADNPEGOGWLLAPITAYSQOTRGLLCIITSLTGRDKN	332
Qy	241	QVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAGPKGITQMTYTNVDQDLVGWQA	300
Db	333	QVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAGPKGITQMTYTNVDQDLVGWQA	392
Qy	301	PPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGLLSPPRVSVYKSGSGGPLLCP	360
Db	393	PPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGLLSPPRVSVYKSGSGGPLLCP	452
Qy	361	GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	393
Db	453	GHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	485

Search completed: May 26, 2005, 22:42:58
Job time : 69.5692 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 22.0543 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: US-10-650-585-12

Perfect score: 1987

Sequence: 1 ALLTSPYKVLARLIWL.....RGNAKAYDFIPVESMETTMR 380

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*

- 1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep.*
- 2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
- 3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
- 4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
- 5: /cgn2_6/ptodata/1/iaa/PCUS_COMB.pep.*
- 6: /cgn2_6/ptodata/1/iaa/backfiles.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1987	100.0	380	4	US-10-017-736C-12
2	1987	100.0	393	4	US-10-017-736C-11
3	1987	100.0	409	4	US-10-017-736C-2
4	1887	95.0	2201	4	US-09-539-601-6
5	1887	95.0	2201	4	US-09-539-601-15
6	1887	95.0	2201	4	US-10-029-907-3
7	1887	95.0	2201	4	US-09-539-601-3
8	1887	95.0	3010	4	US-09-539-601-21
9	1887	95.0	3010	4	US-09-539-601-27
10	1881	94.7	1692	3	US-09-263-933-4
11	1881	94.7	1692	4	US-09-919-901-4
12	1881	94.7	1692	4	US-10-191-966-4
13	1881	94.7	2307	3	US-09-263-933-2
14	1881	94.7	2307	4	US-09-919-901-2
15	1881	94.7	2307	4	US-10-191-966-2
16	1880	94.6	3010	4	US-09-539-601-33
17	1878	94.5	1692	3	US-09-263-933-11
18	1878	94.5	1692	4	US-09-919-901-11
19	1878	94.5	1692	4	US-10-191-966-11
20	1878	94.5	2307	3	US-09-263-933-9
21	1878	94.5	2307	4	US-09-919-901-9
22	1878	94.5	2307	4	US-10-191-966-9
23	1869	94.1	1692	3	US-09-263-933-18
24	1869	94.1	1692	4	US-09-919-901-18
25	1869	94.1	1692	4	US-10-191-966-18
26	1869	94.1	2307	3	US-09-263-933-16
27	1869	94.1	2307	4	US-09-919-901-16

28	1869	94.1	2307	4	US-10-191-966-16	Sequence 16, Appl
29	1869	94.1	3010	3	US-09-014-416-3	Sequence 3, Appl
30	1842	92.7	352	4	US-10-017-736C-13	Sequence 13, Appl
31	1823	91.7	2013	1	US-08-324-977-12	Sequence 12, Appl
32	1823	91.7	2013	2	US-08-384-616-12	Sequence 12, Appl
33	1823	91.7	2013	2	US-08-904-686A-12	Sequence 12, Appl
34	1823	91.7	2013	3	US-09-315-850-12	Sequence 12, Appl
35	1823	91.7	2201	3	US-08-952-981A-2	Sequence 2, Appl
36	1823	91.7	2620	1	US-08-324-977-32	Sequence 32, Appl
37	1823	91.7	2620	2	US-08-384-616-32	Sequence 32, Appl
38	1823	91.7	2620	2	US-08-904-686A-32	Sequence 32, Appl
39	1823	91.7	2620	3	US-09-315-850-32	Sequence 32, Appl
40	1823	91.7	2621	1	US-08-324-977-36	Sequence 36, Appl
41	1823	91.7	2621	2	US-08-384-616-36	Sequence 36, Appl
42	1823	91.7	2621	2	US-08-904-686A-36	Sequence 36, Appl
43	1823	91.7	2621	3	US-09-315-850-36	Sequence 2, Appl
44	1823	91.7	3010	1	US-08-324-977-2	Sequence 14, Appl
45	1823	91.7	3010	1	US-08-324-977-14	

ALIGNMENTS

RESULT 1
US-10-017-736C-12
; Sequence 12, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-12

Query Match		100.0%;	Score 1987;	DB 4;	Length 380;
Best Local Similarity		100.0%;	Pred. No. 2.9e-192;		
Matches 380;		Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	ALLTSPYKVLARLIWLQYLITRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF	60		
Db	1	ALLTSPYKVLARLIWLQYLITRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF	60		
Qy	61	DITKLLAIFGLPLVLAQGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTG	120		
Db	61	DITKLLAIFGLPLVLAQGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTG	120		
Qy	121	TYVVDHLTPLQDWAHAGLRDLAVAVEPVSFDMVKLIITWGADTAACGDIISGLPVSARR	180		
Db	121	TYVVDHLTPLQDWAHAGLRDLAVAVEPVSFDMVKLIITWGADTAACGDIISGLPVSARR	180		
Qy	181	GRELLGPADEFQGWRLAPITAYSQOTRGLLGCIITSTIGRDKNOVEGEVQVWSTAT	240		
Db	181	GRELLGPADEFQGWRLAPITAYSQOTRGLLGCIITSTIGRDKNOVEGEVQVWSTAT	240		
Qy	241	QSFLATCVNGVCWTFHAGSKTLAGPKGPTQMTYTNVDQDLVGVQAPPGARSMTPTCTCG	300		
Db	241	QSFLATCVNGVCWTFHAGSKTLAGPKGPTQMTYTNVDQDLVGVQAPPGARSMTPTCTCG	300		
Qy	301	SSDLYLVTRHADVTPVRRRGDSRGLSPRVSYLKSSGGPLICPSGHAVGIFRAAVCT	360		
Db	301	SSDLYLVTRHADVTPVRRRGDSRGLSPRVSYLKSSGGPLICPSGHAVGIFRAAVCT	360		

Db 301 SSDLVLTTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHVGIFRAAVCT 360
Qy 361 RGVAKAVDFIPVESMETTMR 380
Db 361 RGVAKAVDFIPVESMETTMR 380

RESULT 2

US-10-017-736C-11
; Sequence 11, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11

Query Match 100.0%; Score 1987; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 3e-192;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALLTSLSPYKVLARLIWQLYLTIRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF 60
Db 14 ALLTSLSPYKVLARLIWQLYLTIRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF 73
Qy 61 DITKLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
Db 74 DITKLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTG 133
Qy 121 TVYVDHLTPLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 180
Db 134 TVYVDHLTPLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 193
Qy 181 GREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 240
Db 194 GREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 253
Qy 241 QSFLLATCVNGVCWTVFHGAGSKTLAGPKPIQMTYTNVDQDLVGWQAPPGARSMPTCTCG 300
Db 254 QSFLLATCVNGVCWTVFHGAGSKTLAGPKPIQMTYTNVDQDLVGWQAPPGARSMPTCTCG 313
Qy 301 SSDLVLTTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHVGIFRAAVCT 360
Db 314 SSDLVLTTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHVGIFRAAVCT 373
Qy 361 RGVAKAVDFIPVESMETTMR 380
Db 374 RGVAKAVDFIPVESMETTMR 393

RESULT 3

US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise

; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match 100.0%; Score 1987; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 3.2e-192;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ALLTSLSPYKVLARLIWQLYLTIRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF 60
Db 18 ALLTSLSPYKVLARLIWQLYLTIRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIF 77
Qy 61 DITKLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTG 120
Db 78 DITKLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTG 137
Qy 121 TVYVDHLTPLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 180
Db 138 TVYVDHLTPLQDWAHAGLRDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 197
Qy 181 GREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 240
Db 198 GREILLGPADNFEQGWRLAPITAYSQOTRGLLGCIITSLTGRDKNQVEGEVQVSTAT 257
Qy 241 QSFLLATCVNGVCWTVFHGAGSKTLAGPKPIQMTYTNVDQDLVGWQAPPGARSMPTCTCG 300
Db 258 QSFLLATCVNGVCWTVFHGAGSKTLAGPKPIQMTYTNVDQDLVGWQAPPGARSMPTCTCG 317
Qy 301 SSDLVLTTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHVGIFRAAVCT 360
Db 318 SSDLVLTTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPILCPSGHVGIFRAAVCT 377
Qy 361 RGVAKAVDFIPVESMETTMR 380
Db 378 RGVAKAVDFIPVESMETTMR 397

RESULT 4

US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match 95.0%; Score 1887; DB 4; Length 2201;
Best Local Similarity 93.4%; Pred. No. 5.1e-181;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

Qy 2 LLTSLSPYKVLARLIWQLYLTIRVEAHLQVWIPPLNVGRGDAIILLTCAVHPELIFD 61

Db 19 LTLSPHYKFLARLIWVQYFITRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 78
QY 62 ITKLLAIAFGPLMVLAQGITKVPYFVRAOGLIRACMLVRKAAGCHVYQMAFMKLAALTGT 121
Db 79 ITKLLAIAFGPLMVLAQGITKVPYFVRAOGLIRACMLVRKAAGCHVYQMAFMKLAALTGT 138
QY 122 YVVDHLTPLODWAHAGRLDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 139 YVVDHLTPLODWAHAGRLDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRG 198
QY 182 REILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVWSTATQ 241
Db 199 REIHLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVWSTATQ 258
QY 242 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDQDLVGVQAPPGARSMTPTCTCGS 301
Db 259 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDQDLVGVQAPPGARSMTPTCTCGS 318
QY 302 SDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILPCPSGHAVGIFPRAAVCTR 361
Db 319 SDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILPCPSGHAVGIFPRAAVCTR 378
QY 362 GVAKAVDFVPVSMETMMR 380
Db 379 GVAKAVDFVPVSMETMMR 397

RESULT 5

US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; PRIOR FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 15
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match 95.0%; Score 1887; DB 4; Length 2201;
Best Local Similarity 93.4%; Pred. No. 5.1e-181;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LTLSPYKVLARLIWVQYFITRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 61
Db 19 LTLSPHYKFLARLIWVQYFITRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 78
QY 62 ITKLLAIAFGPLMVLAQGITKVPYFVRAOGLIRACMLVRKAAGCHVYQMAFMKLAALTGT 121
Db 79 ITKLLAIAFGPLMVLAQGITKVPYFVRAOGLIRACMLVRKAAGCHVYQMAFMKLAALTGT 138
QY 122 YVVDHLTPLODWAHAGRLDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 139 YVVDHLTPLODWAHAGRLDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRG 198
QY 182 REILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVWSTATQ 241
Db 199 REIHLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVWSTATQ 258
QY 242 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDQDLVGVQAPPGARSMTPTCTCGS 301
Db 259 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDQDLVGVQAPPGARSMTPTCTCGS 318
QY 302 SDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILPCPSGHAVGIFPRAAVCTR 361

Db 319 SDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILPCPSGHAVGIFPRAAVCTR 378
QY 362 GVAKAVDFVPVSMETMMR 380
Db 379 GVAKAVDFVPVSMETMMR 397

RESULT 6

US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match 95.0%; Score 1887; DB 4; Length 2201;
Best Local Similarity 93.4%; Pred. No. 5.1e-181;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LTLSPYKVLARLIWVQYFITRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 61
Db 19 LTLSPHYKFLARLIWVQYFITRAEHLQVWIPPLNVRGGSDAVILLTCAIHPELIPT 78
QY 62 ITKLLAIAFGPLMVLAQGITKVPYFVRAOGLIRACMLVRKAAGCHVYQMAFMKLAALTGT 121
Db 79 ITKLLAIAFGPLMVLAQGITKVPYFVRAOGLIRACMLVRKAAGCHVYQMAFMKLAALTGT 138
QY 122 YVVDHLTPLODWAHAGRLDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 139 YVVDHLTPLODWAHAGRLDLAVAVEPVFSDMEVKIITWGADTAACGDIISGLPVSARRG 198
QY 182 REILGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVWSTATQ 241
Db 199 REIHLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITSLTGRDKNQVEGEVQVWSTATQ 258
QY 242 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDQDLVGVQAPPGARSMTPTCTCGS 301
Db 259 SFLATCVNGCVWTVFHGAGSKTLGAPKGPITQMTYNVDQDLVGVQAPPGARSMTPTCTCGS 318
QY 302 SDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILPCPSGHAVGIFPRAAVCTR 361
Db 319 SDLYLVTRHADVIPVRRRGRSGSLSPRPVSYLKGSSGGPILPCPSGHAVGIFPRAAVCTR 378
QY 362 GVAKAVDFVPVSMETMMR 380
Db 379 GVAKAVDFVPVSMETMMR 397

RESULT 7

US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343

```
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3010
; TYPE: PR1
; ORGANISM: Hepatitis C virus
US-09-539-601-3

Query Match          95.0%; Score 1887; DB 4; Length 3010;
Best Local Similarity 93.4%; Pred. No. 8.1e-181;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

Qy 2 LLTSPYKVLARLIWQLYITRAEHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 828 LLTSPHYKLFARLIWQLYITRAEHLQVWIPPLNVRGGRDAVILLTCAIHPELIFT 887

Qy 62 ITKLLAIFGPLMVLAQGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
Db 888 ITKLLAILGPLMVLAQGITKVPYFVRAHGLIRACMLVRKVAGHYVQMALMKLAALTGT 947

Qy 122 YVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 948 YVYDHLTPLRDWAHAGLRDLAVAVEPVFSDMETKVIITWGADTAACGDIILGLPVSARRG 1007

Qy 182 REILGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDNQVGEVQVSTATQ 241
Db 1008 REILGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDNQVGEVQVSTATQ 1067

Qy 242 SFLATCVNGVCWTVFHGAGSKTLGPKGPITOMYTNVDQDLVQWQAPPGARSMTPTCTCGS 301
Db 1068 SFLATCVNGVCWTVFHGAGSKTLGPKGPITOMYTNVDQDLVQWQAPPGARSMTPTCTCGS 1127

Qy 302 SDLYLVTRHADVPVRRRGDSRGLSPRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTR 361
Db 1128 SDLYLVTRHADVPVRRRGDSRGLSPRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTR 1187

Qy 362 GVAKAVDFIPVESMETTMR 380
Db 1188 GVAKAVDFIPVESMETTMR 1206

RESULT 9
US-09-539-601-27
; Sequence 27, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
; LENGTH: 3010
; TYPE: PR1
; ORGANISM: Hepatitis C virus
US-09-539-601-27

Query Match          95.0%; Score 1887; DB 4; Length 3010;
Best Local Similarity 93.4%; Pred. No. 8.1e-181;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

Qy 2 LLTSPYKVLARLIWQLYITRAEHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 828 LLTSPHYKLFARLIWQLYITRAEHLQVWIPPLNVRGGRDAVILLTCAIHPELIFT 887

Qy 62 ITKLLAIFGPLMVLAQGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
Db 888 ITKLLAILGPLMVLAQGITKVPYFVRAHGLIRACMLVRKVAGHYVQMALMKLAALTGT 947

Qy 122 YVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 948 YVYDHLTPLRDWAHAGLRDLAVAVEPVFSDMETKVIITWGADTAACGDIILGLPVSARRG 1007

Qy 182 REILGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDNQVGEVQVSTATQ 241
Db 1008 REILGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDNQVGEVQVSTATQ 1067

Qy 242 SFLATCVNGVCWTVFHGAGSKTLGPKGPITOMYTNVDQDLVQWQAPPGARSMTPTCTCGS 301
Db 1068 SFLATCVNGVCWTVFHGAGSKTLGPKGPITOMYTNVDQDLVQWQAPPGARSMTPTCTCGS 1127

Qy 302 SDLYLVTRHADVPVRRRGDSRGLSPRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTR 361
Db 1128 SDLYLVTRHADVPVRRRGDSRGLSPRPVSYLKSGSGGPLLCPGSHAVGIFRAAVCTR 1187

Qy 362 GVAKAVDFIPVESMETTMR 380
Db 1188 GVAKAVDFIPVESMETTMR 1206

RESULT 8
US-09-539-601-21
; Sequence 21, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 3010
; TYPE: PR1
; ORGANISM: Hepatitis C virus
US-09-539-601-21

Query Match          95.0%; Score 1887; DB 4; Length 3010;
Best Local Similarity 93.4%; Pred. No. 8.1e-181;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;
```



```
Qy 302 SDLVLTTHADVIPVRRGDSRGSLLSPRPVSYLKSGSGPCLLCPSGHAGVIFRAAVCTR 361
Db 1128 SDLVLTTHADVIPVRRGDSRGSLLSPRPVSYLKSGSGPCLLCPSGHAGVIFRAAVCTR 1187
Qy 362 GVAKAVDFPVESMETTMR 380
Db 1188 GVAKAVDFPVESMETTMR 1206

RESULT 10
US-09-933-4
; Sequence 4, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
US-09-263-933-4
Query Match 94.7%; Score 1881; DB 3; Length 1692;
Best Local Similarity 93.1%; Pred. No. 1.4e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy 2 LTLSPYKVLARLIWQLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 107 LTLSPYKVLARLIWQLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 166
Qy 62 ITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
Db 167 ITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 226
Qy 122 YVYDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAACGDIILGLPVSARRG 181
Db 227 YIYNHLPLRDWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAACGDIILGLPVSARRG 286
Qy 182 REILGPADNPEGOGWRLLAPITAYSQOTRGLLCITSLTGRDNQVEGEVQVVSATQ 241
Db 287 KEILGPADSLRGRWRLLAPITAYSQOTRGLLCITSLTGRDNQVEGEVQVVSATQ 346
Qy 242 SFLATCNGVCWTVFHGAGSKTLGPKGITOMVTNVDQDLVGNQAPPGARSMTPTCTCGS 301
Db 347 SFLATCNGVCWTVFHGAGSKTLGPKGITOMVTNVDQDLVGNQAPPGARSMTPTCTCGS 406
Qy 302 SDLVLTTHADVIPVRRGDSRGSLLSPRPVSYLKSGSGPCLLCPSGHAGVIFRAAVCTR 361
Db 407 SDLVLTTHADVIPVRRGDSRGSLLSPRPVSYLKSGSGPCLLCPSGHAGVIFRAAVCTR 466
Qy 362 GVAKAVDFPVESMETTMR 380
Db 467 GVAKAVDFPVESMETTMR 485

RESULT 11
US-09-919-901-4
; Sequence 4, Application US/0991901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
```

```
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4
Query Match 94.7%; Score 1881; DB 4; Length 1692;
Best Local Similarity 93.1%; Pred. No. 1.4e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy 2 LTLSPYKVLARLIWQLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 107 LTLSPYKVLARLIWQLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 166
Qy 62 ITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
Db 167 ITKLLAIFGLPMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 226
Qy 122 YVYDHLTPLODWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAACGDIILGLPVSARRG 181
Db 227 YIYNHLPLRDWAHAGLRDLAVAVEPVFSDMEVKIITWGADTAACGDIILGLPVSARRG 286
Qy 182 REILGPADNPEGOGWRLLAPITAYSQOTRGLLCITSLTGRDNQVEGEVQVVSATQ 241
Db 287 KEILGPADSLRGRWRLLAPITAYSQOTRGLLCITSLTGRDNQVEGEVQVVSATQ 346
Qy 242 SFLATCNGVCWTVFHGAGSKTLGPKGITOMVTNVDQDLVGNQAPPGARSMTPTCTCGS 301
Db 347 SFLATCNGVCWTVFHGAGSKTLGPKGITOMVTNVDQDLVGNQAPPGARSMTPTCTCGS 406
Qy 302 SDLVLTTHADVIPVRRGDSRGSLLSPRPVSYLKSGSGPCLLCPSGHAGVIFRAAVCTR 361
Db 407 SDLVLTTHADVIPVRRGDSRGSLLSPRPVSYLKSGSGPCLLCPSGHAGVIFRAAVCTR 466
Qy 362 GVAKAVDFPVESMETTMR 380
Db 467 GVAKAVDFPVESMETTMR 485

RESULT 12
US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
```

```
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-191-966-4

Query Match          94.7%; Score 1881; DB 4; Length 1692;
Best Local Similarity 93.1%; Pred. No. 1.4e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy  2  LLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGRDAIILLTCVHPELIFD 61
Db  107 LLTSPYKVFARLIWMLQYFTTAEHLHVMIPPLNARGGRDAIILLMCAVHPELIFD 166

Qy  62  ITKLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFKLAALTGT 121
Db  167 ITKLLAIFGLMVLQAGITRVPYFVRAQGLIHACMLVRKVAGGHYVQMAFKLALGTGT 226

Qy  122 YVYDHLTPLODAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db  227 YIYNHLTPLRDAHAGLRDLAVAVEPVVFSDMETKIITWGADTAACGDIILGLPVSARRG 286

Qy  182 REILGPNADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQ 241
Db  287 KEILGPADSLEGRWRLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQ 346

Qy  242 SFLATCNGVCWTYFHGAGSKTLAGPKGPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGS 301
Db  347 SFLATCNGVCWTYFHGAGSKTLAGPKGPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGS 406

Qy  302 SDLVLTNRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 361
Db  407 SDLVLTNRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 466

Qy  362 GVAKAVDFIPVESMETTMR 380
Db  467 GVAKAVDFIPVESMETTMR 485

RESULT 13
US-09-263-933-2
; Sequence 2, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-263-933-2

Query Match          94.7%; Score 1881; DB 3; Length 2307;
Best Local Similarity 93.1%; Pred. No. 2.2e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy  2  LLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGRDAIILLTCVHPELIFD 61
Db  199 LLTSPYKVFARLIWMLQYFTTAEHLHVMIPPLNARGGRDAIILLMCAVHPELIFD 258

Qy  62  ITKLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFKLAALTGT 121
Db  259 ITKLLAIFGLMVLQAGITRVPYFVRAQGLIHACMLVRKVAGGHYVQMAFKLALGTGT 318

Qy  122 YVYDHLTPLODAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db  319 YIYNHLTPLRDAHAGLRDLAVAVEPVVFSDMETKIITWGADTAACGDIILGLPVSARRG 378

Qy  182 REILGPNADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQ 241
Db  379 KEILGPADSLEGRWRLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQ 438

Qy  242 SFLATCNGVCWTYFHGAGSKTLAGPKGPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGS 301
Db  439 SFLATCNGVCWTYFHGAGSKTLAGPKGPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGS 498

; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-650-585-12.ra1

Query Match          94.7%; Score 1881; DB 4; Length 2307;
Best Local Similarity 93.1%; Pred. No. 2.2e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy  2  LLTSPYKVLARLIWMLQYLITRVEAHLQVWIPPLNVRGRDAIILLTCVHPELIFD 61
Db  199 LLTSPYKVFARLIWMLQYFTTAEHLHVMIPPLNARGGRDAIILLMCAVHPELIFD 258

Qy  62  ITKLLAIFGLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFKLAALTGT 121
Db  259 ITKLLAIFGLMVLQAGITRVPYFVRAQGLIHACMLVRKVAGGHYVQMAFKLALGTGT 318

Qy  122 YVYDHLTPLODAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db  319 YIYNHLTPLRDAHAGLRDLAVAVEPVVFSDMETKIITWGADTAACGDIILGLPVSARRG 378

Qy  182 REILGPNADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQ 241
Db  379 KEILGPADSLEGRWRLAPITAYSQOTRGLGCIITSLTGRDKNQVEGEVQVSTATQ 438

Qy  242 SFLATCNGVCWTYFHGAGSKTLAGPKGPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGS 301
Db  439 SFLATCNGVCWTYFHGAGSKTLAGPKGPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGS 498
```

QY 302 SDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 361
|||
Db 499 SDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 558
|||
QY 362 GVAKAVDFIPVESMETMR 380
|||
Db 559 GVAKAVDFIPVESMETMR 577
|||

RESULT 15
US-10-191-966-2
; Sequence 2, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-10-191-966-2

Query Match 94.7%; Score 1881; DB 4; Length 2307;
Best Local Similarity 93.1%; Pred. No. 2.2e-180;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;
QY 2 LLTSLPYKVLARLIWVQLQYLITRVEAHLQVWIPPLNVRRGGRDAIILLTCAVHPELIPD 61
|||
Db 199 LLTSLPYKVFARLIWVQLQYFTTRAEAHILWVIPPPLNARGGRDAIILLMCAVHPELIPD 258
|||
QY 62 ITKLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
|||
Db 259 ITKLLAILGLPLMVLQAGITRVYFVRAOGLIHACMLVRKVAGHYVQMAFMKLGALTGT 318
|||
QY 122 YVYDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
|||
Db 319 YIYNHLTPLRDWAHAGLRDLAVAVEPVIFSDMETKIITWGADTAACGDIILGLPVSARRG 378
|||
QY 182 REILLGPADNFCQGWELLAPITAYSQOTRGLLCIITSITGRDKNQVEGEVQVNSTATQ 241
|||
Db 379 KEILLGPADSLGEGRWELLAPITAYSQOTRGLLCIITSITGRDKNQVEGEVQVNSTATQ 438
|||
QY 242 SFLATCVNGVCWTVFHGAGSKTLGAPKGPITOMYTNVDQDLVGVQAPPGARSMTPCTCGS 301
|||
Db 439 SFLATCVNGVCWTVYHAGAGSKTLGAPKGPITOMYTNVDQDLVGVQAPPGARSLTPCTCGS 498
|||
QY 302 SDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 361
|||
Db 499 SDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTR 558
|||
QY 362 GVAKAVDFIPVESMETMR 380
|||
Db 559 GVAKAVDFIPVESMETMR 577
|||

Search completed: May 26, 2005, 22:03:41
Job time : 24.0543 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 66.1628 Seconds
(without alignments)

1981.317 Million cell updates/sec

Title: US-10-650-585-12

Perfect score: 1987

Sequence: 1 ALLTSPYKVLARLIWLL.....RGVAKAVDFIPVSMETTMR 380

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications AA:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1987	100.0	380	13	US-10-017-736-12
2	1987	100.0	380	15	US-10-650-585-12
3	1987	100.0	393	13	US-10-017-736-11
4	1987	100.0	393	15	US-10-650-585-11
5	1987	100.0	409	13	US-10-017-736-2
6	1987	100.0	409	15	US-10-650-585-2
7	1887	95.0	2201	13	US-10-029-907-3
8	1887	95.0	2201	14	US-10-309-561-3
9	1887	95.0	2201	16	US-10-789-355-3
10	1887	95.0	3010	15	US-10-467-000-1
11	1881	94.7	1692	10	US-09-919-901-4
12	1881	94.7	1692	14	US-10-191-966-4
13	1881	94.7	2307	10	US-09-919-901-2

14	1881	94.7	2307	14	US-10-191-966-2	Sequence 2, Appli
15	1878	94.5	1692	10	US-09-919-901-11	Sequence 11, Appl
16	1878	94.5	1692	14	US-10-191-966-11	Sequence 11, Appl
17	1878	94.5	2307	10	US-09-919-901-9	Sequence 9, Appli
18	1878	94.5	2307	14	US-10-191-966-9	Sequence 9, Appli
19	1869	94.1	1692	10	US-09-919-901-18	Sequence 18, Appl
20	1869	94.1	1692	14	US-10-191-966-18	Sequence 18, Appl
21	1869	94.1	2307	10	US-09-919-901-16	Sequence 16, Appl
22	1869	94.1	2307	14	US-10-191-966-16	Sequence 16, Appl
23	1863	93.8	3010	16	US-10-333-449A-34	Sequence 34, Appl
24	1842	92.7	352	13	US-10-017-736-13	Sequence 13, Appl
25	1842	92.7	352	15	US-10-650-585-13	Sequence 13, Appl
26	1823	91.7	2201	13	US-10-085-476-2	Sequence 2, Appli
27	1778	89.5	341	13	US-10-017-736-14	Sequence 14, Appl
28	1778	89.5	341	15	US-10-650-585-14	Sequence 14, Appl
29	1717	86.4	3011	9	US-09-742-659-4	Sequence 4, Appli
30	1717	86.4	3011	10	US-09-891-894-3	Sequence 3, Appli
31	1717	86.4	3011	14	US-10-184-150-3	Sequence 3, Appli
32	1717	86.4	3011	15	US-10-328-997-3	Sequence 3, Appli
33	1717	86.4	3012	9	US-09-238-076-2	Sequence 2, Appli
34	1717	86.4	3012	10	US-09-995-937-2	Sequence 2, Appli
35	1717	86.4	3012	10	US-09-917-563-2	Sequence 2, Appli
36	1715	86.3	3011	9	US-09-916-359-2	Sequence 2, Appli
37	1715	86.3	3011	15	US-10-296-734-406	Sequence 406, App
38	1715	86.3	3011	16	US-10-445-724-2	Sequence 2, Appli
39	1713	86.2	3011	9	US-09-238-076-20	Sequence 20, Appl
40	1713	86.2	3011	10	US-09-995-937-20	Sequence 20, Appl
41	1713	86.2	3011	10	US-09-917-563-20	Sequence 20, Appl
42	1710	86.1	2894	9	US-09-941-611-23	Sequence 23, Appl
43	1710	86.1	2894	14	US-10-044-995-23	Sequence 23, Appl
44	1710	86.1	2894	16	US-10-822-871-23	Sequence 23, Appl
45	1710	86.1	3011	9	US-09-952-572-9	Sequence 9, Appli

ALIGNMENTS

RESULT 1

US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

Query Match 100.0%; Score 1987; DB 13; Length 380;
Best Local Similarity 100.0%; Pred. No. 2.9e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	ALLTSPYKVLARLIWLLITRVEAHQVWIPPLNVRGGRDAIILLTCAVHPLEIF	60
Db	1	ALLTSPYKVLARLIWLLITRVEAHQVWIPPLNVRGGRDAIILLTCAVHPLEIF	60
QY	61	DIITKLLAIFGPMVLVQAGITKVPYFVRAQGLIRACMLVRKAAGGHYVQAFKLAALTG	120
Db	61	DIITKLLAIFGPMVLVQAGITKVPYFVRAQGLIRACMLVRKAAGGHYVQAFKLAALTG	120
QY	121	TYVYDHLTPLQDWAHAGLRDLAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSAARR	180
Db	121	TYVYDHLTPLQDWAHAGLRDLAVAVPEVIFSDMEVKIITWGADTAACGDIISGLPVSAARR	180

```
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTAT 240
Db 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTAT 240
QY 241 QSFLLATCVNGVCTVTFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCG 300
Db 241 QSFLLATCVNGVCTVTFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCG 300
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYKSGSGPILLCPSGHAVGIFRAAVCT 360
Db 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYKSGSGPILLCPSGHAVGIFRAAVCT 360
QY 361 RGVAKAVDFIPVESMETTMR 380
Db 361 RGVAKAVDFIPVESMETTMR 380

RESULT 2
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

Query Match 100.0%; Score 1987; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 2.9e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALLTSPYKVLARLIWLIQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPLELIF 60
Db 1 ALLTSPYKVLARLIWLIQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPLELIF 60
QY 61 DITKLLAIFGLPLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQVAFMKLAALTG 120
Db 61 DITKLLAIFGLPLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQVAFMKLAALTG 120
QY 121 TYVVDHLTPLQDWAHAGRLDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 180
Db 121 TYVVDHLTPLQDWAHAGRLDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 180
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTAT 240
Db 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTAT 240
QY 241 QSFLLATCVNGVCTVTFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCG 300
Db 241 QSFLLATCVNGVCTVTFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCG 300
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYKSGSGPILLCPSGHAVGIFRAAVCT 360
Db 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYKSGSGPILLCPSGHAVGIFRAAVCT 360
QY 361 RGVAKAVDFIPVESMETTMR 380
Db 361 RGVAKAVDFIPVESMETTMR 380

RESULT 3
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

Query Match 100.0%; Score 1987; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 2.9e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALLTSPYKVLARLIWLIQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPLELIF 60
Db 1 ALLTSPYKVLARLIWLIQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPLELIF 60
QY 61 DITKLLAIFGLPLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQVAFMKLAALTG 120
Db 61 DITKLLAIFGLPLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQVAFMKLAALTG 120
QY 121 TYVVDHLTPLQDWAHAGRLDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 180
Db 121 TYVVDHLTPLQDWAHAGRLDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 180
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTAT 240
Db 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTAT 240
QY 241 QSFLLATCVNGVCTVTFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCG 300
Db 241 QSFLLATCVNGVCTVTFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCG 300
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYKSGSGPILLCPSGHAVGIFRAAVCT 360
Db 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYKSGSGPILLCPSGHAVGIFRAAVCT 360
QY 361 RGVAKAVDFIPVESMETTMR 380
Db 361 RGVAKAVDFIPVESMETTMR 380
```

```
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

Query Match 100.0%; Score 1987; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 3.1e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALLTSPYKVLARLIWLIQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPLELIF 60
Db 14 ALLTSPYKVLARLIWLIQYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPLELIF 73
QY 61 DITKLLAIFGLPLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQVAFMKLAALTG 120
Db 74 DITKLLAIFGLPLMVLQAGITKVPYFVRAQGLIRACMLVRKAAGHYVQVAFMKLAALTG 133
QY 121 TYVVDHLTPLQDWAHAGRLDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 180
Db 134 TYVVDHLTPLQDWAHAGRLDLAVAVEPVI FSDMEVKIITWGADTAACGDIISGLPVSARR 193
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTAT 240
Db 194 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDNQVGEVQVWSTAT 253
QY 241 QSFLLATCVNGVCTVTFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCG 300
Db 254 QSFLLATCVNGVCTVTFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCG 313
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYKSGSGPILLCPSGHAVGIFRAAVCT 360
Db 314 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSVYKSGSGPILLCPSGHAVGIFRAAVCT 373
QY 361 RGVAKAVDFIPVESMETTMR 380
Db 374 RGVAKAVDFIPVESMETTMR 393

RESULT 4
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11
```

Query Match 100.0%; Score 1987; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 3.1e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALLTSLPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPHELIF 60
DB 14 ALLTSLPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPHELIF 73
QY 61 DITKLLAIFGLPLVLAQITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFMKLAALTG 120
DB 74 DITKLLAIFGLPLVLAQITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFMKLAALTG 133
QY 121 TTYVDHLTFLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 180
DB 134 TTYVDHLTFLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 193
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQEVEGVVSTAT 240
DB 194 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQEVEGVVSTAT 253
QY 241 QSFATCVNGVCWTVFVGAGSKTLGPKGPIITQMYTNVDQDLVGMQAPPGARSMTPTCTG 300
DB 254 QSFATCVNGVCWTVFVGAGSKTLGPKGPIITQMYTNVDQDLVGMQAPPGARSMTPTCTG 313
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCT 360
DB 314 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCT 373
QY 361 RGAKAVDFIPVESMETTMR 380
DB 374 RGAKAVDFIPVESMETTMR 393

RESULT 5
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2

Query Match 100.0%; Score 1987; DB 13; Length 409;
Best Local Similarity 100.0%; Pred. No. 3.2e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALLTSLPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPHELIF 60
DB 18 ALLTSLPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPHELIF 77
QY 61 DITKLLAIFGLPLVLAQITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFMKLAALTG 120
DB 78 DITKLLAIFGLPLVLAQITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFMKLAALTG 137
QY 121 TTYVDHLTFLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 180
DB 138 TTYVDHLTFLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 197
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQEVEGVVSTAT 240
DB 198 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQEVEGVVSTAT 257
QY 241 QSFATCVNGVCWTVFVGAGSKTLGPKGPIITQMYTNVDQDLVGMQAPPGARSMTPTCTG 300
DB 258 QSFATCVNGVCWTVFVGAGSKTLGPKGPIITQMYTNVDQDLVGMQAPPGARSMTPTCTG 317
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCT 360
DB 318 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCT 377
QY 361 RGAKAVDFIPVESMETTMR 380
DB 378 RGAKAVDFIPVESMETTMR 397

RESULT 7
US-10-029-907-3
; Sequence 3, Application US/10029907
; Publication No. US20020142350A1

QY 241 QSFATCVNGVCWTVFVGAGSKTLGPKGPIITQMYTNVDQDLVGMQAPPGARSMTPTCTG 300
DB 258 QSFATCVNGVCWTVFVGAGSKTLGPKGPIITQMYTNVDQDLVGMQAPPGARSMTPTCTG 317
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCT 360
DB 318 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCT 377
QY 361 RGAKAVDFIPVESMETTMR 380
DB 378 RGAKAVDFIPVESMETTMR 397

RESULT 6
US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-2

Query Match 100.0%; Score 1987; DB 15; Length 409;
Best Local Similarity 100.0%; Pred. No. 3.2e-187;
Matches 380; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ALLTSLPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPHELIF 60
DB 18 ALLTSLPYKVLARLIWVLYLITRVEAHLQWIPPLNVRGGRDAIILLTCAVHPHELIF 77
QY 61 DITKLLAIFGLPLVLAQITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFMKLAALTG 120
DB 78 DITKLLAIFGLPLVLAQITKVPYFVRAQGLIRACMLVRKAAGGHYVQMAFMKLAALTG 137
QY 121 TTYVDHLTFLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 180
DB 138 TTYVDHLTFLQDWAHAGRLDVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARR 197
QY 181 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQEVEGVVSTAT 240
DB 198 GREILLGPADNFEQGWRLLAPITAYSQOTRGLLGCIITSLTGRDKNQEVEGVVSTAT 257
QY 241 QSFATCVNGVCWTVFVGAGSKTLGPKGPIITQMYTNVDQDLVGMQAPPGARSMTPTCTG 300
DB 258 QSFATCVNGVCWTVFVGAGSKTLGPKGPIITQMYTNVDQDLVGMQAPPGARSMTPTCTG 317
QY 301 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCT 360
DB 318 SSDLYLVTRHADVIPVRRRGDSRGLSPRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCT 377
QY 361 RGAKAVDFIPVESMETTMR 380
DB 378 RGAKAVDFIPVESMETTMR 397

RESULT 7
US-10-029-907-3
; Sequence 3, Application US/10029907
; Publication No. US20020142350A1

```
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRN
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
; US-10-029-907-3

Query Match          95.0%; Score 1887; DB 13; Length 2201;
Best Local Similarity 93.4%; Pred. No. 2.4e-176;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LTLSPYKVLARLIWQLYLRVFAHLOWIPPLNVRGGRDAIILLTCAVHPELIFD 61
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 19 LTLSPHYKFLARLIWQLYLRVFAHLOWIPPLNVRGGRDAVILLTCAIHPELI 78
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

QY 62 ITKLLAIFGLMVLQAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 79 ITKLLAILGLMVLQAGITKVPYFVRAHGLIRACMLVRKVAGCHYVQMALMKLAALTGT 138
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

QY 122 YVVDHLTPLOQWHAHGLRLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 139 YVVDHLTPLRDWAHAGRLDLAVAVEPVFSDMETKVTITWGADTAACGDIISGLPVSARRG 198
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

QY 182 REILLGPADNFEQGWRLAPITAYSQOTRGLLGCIITSLTGRDNQVEGEVQVSTATQ 241
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 199 REIHLPADSLQGWRLAPITAYSQOTRGLLGCIITSLTGRDNQVEGEVQVSTATQ 258
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

QY 242 SFLATCVNGVCWTVFHGAGSKTLAGPKGPIQMTYTNVDQDLVGWQAPPGARSLTPCTCGS 301
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 259 SFLATCVNGVCWTVYHAGSKTLAGPKGPIQMTYTNVDQDLVGWQAPPGARSLTPCTCGS 318
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

QY 302 SDLYLVRHADVIPVRRGDSRGLSPRPVSVYLGSSGGPLLCPSGHAVGIFRAAVCTR 361
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 319 SDLYLVRHADVIPVRRGDSRGLSPRPVSVYLGSSGGPLLCPSGHAVGIFRAAVCTR 378
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

QY 362 GVAKAVDFIPVESMETTMR 380
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db 379 GVAKAVDFIPVESMETTMR 397
    |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||

RESULT 8
US-10-309-561-3
; Sequence 3, Application US/10309561
; Publication No. US20030148348A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/309,561
; CURRENT FILING DATE: 2002-12-04
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25

; US-10-789-355-3
; Sequence 3, Application US/10789355
; Publication No. US20040180333A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/789,355
; CURRENT FILING DATE: 2004-02-27
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRN
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
```



```
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-789-355-3

Query Match
Best Local Similarity 95.0%; Score 1887; DB 16; Length 2201;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LLTSPYKVLARLIWVLOVLTIRVEAHLQVMIPLPLNVRGGRDAIILLTCAVHPELIFD 61
DB 19 LLTSPHYKFLARLIWVLOVLTIRAEHLQVMIPLPLNVRGGRDAVILLTCAIHPELIFT 78
QY 62 ITKLLAIFGLPLMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
DB 79 ITKLLAILGLPLMVLOAGITKVPYFVRAHGLIRACMLVRKVAGHYVQMALMKLAALTGT 138
QY 122 YVVDHLTPLQDWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRG 181
DB 139 YVVDHLTPLRDWAHAGLRDLAVAVEPVVFSMDMETKVIITWGADTAACDIIISGLPVSARRG 198
QY 182 REILGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQ 241
DB 199 REILGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQ 258
QY 242 SFLATCVNGVCWTVFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCGS 301
DB 259 SFLATCVNGVCWTVYHAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCGS 318
QY 302 SDLYLVRHADVIPVRRRGRSGLSPRPVSVYLGSSGGPLLCPSGHAVGIFRAAVCTR 361
DB 319 SDLYLVRHADVIPVRRRGRSGLSPRPVSVYLGSSGGPLLCPSGHAVGIFRAAVCTR 378
QY 362 GVAKAVDFIPVESMETTMR 380
DB 379 GVAKAVDFIPVESMETTMR 397

RESULT 10
US-10-467-000-1
; Sequence 1, Application US/10467000
; Publication No. US20040067486A1
; GENERAL INFORMATION:
; APPLICANT: De Francesco, Raffaele
; APPLICANT: Pagnessa, Giacomo
; TITLE OF INVENTION: HEPATITIS C VIRUS REPLICONS AND REPLICON
; FILE REFERENCE: ITR0003P
; CURRENT APPLICATION NUMBER: US/10/467,000
; PRIOR FILING DATE: 2003-07-21
; PRIOR APPLICATION NUMBER: PCT/EP02/00526
; PRIOR FILING DATE: 2002-01-16
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Con 1 HCV isolate nucleic acid
US-10-467-000-1

Query Match
Best Local Similarity 95.0%; Score 1887; DB 15; Length 3010;
Matches 354; Conservative 13; Mismatches 12; Indels 0; Gaps 0;

QY 2 LLTSPYKVLARLIWVLOVLTIRVEAHLQVMIPLPLNVRGGRDAIILLTCAVHPELIFD 61
DB 828 LLTSPHYKFLARLIWVLOVLTIRAEHLQVMIPLPLNVRGGRDAVILLTCAIHPELIFT 887
QY 62 ITKLLAIFGLPLMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121

; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-789-355-3

Query Match
Best Local Similarity 93.1%; Score 1881; DB 10; Length 1692;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

QY 2 LLTSPYKVLARLIWVLOVLTIRVEAHLQVMIPLPLNVRGGRDAIILLTCAVHPELIFD 61
DB 107 LLTSPYKVLARLIWVLOVLTIRAEHLQVMIPLPLNVRGGRDAIILLTCAVHPELIFD 166
QY 62 ITKLLAIFGLPLMVLOAGITKVPYFVRAOGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
DB 167 ITKLLAILGLPLMVLOAGITRVPYFVRAOGLIHACMLVRKVAGHYVQMAFMKLGALTGT 226
QY 122 YVVDHLTPLQDWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACDIIISGLPVSARRG 181
DB 227 YVVDHLTPLRDWAHAGLRDLAVAVEPVVFSMDMETKVIITWGADTAACDIIISGLPVSARRG 286
QY 182 REILGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQ 241
DB 287 KEILGPADNFEQGWRLAPITAYSQOTRGLGCIITSLTGRDKNOVEGEVQVSTATQ 346
QY 242 SFLATCVNGVCWTVFHGAGSKTLAGPKGPIQMTYTNVDQDLVGVQAPPGARSMTPTCTCGS 301
```

Db 347 SFLATCNGVCWTVYHGAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 406
Qy 302 SDLYLVTRHADVIPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 361
Db 407 SDLYLVTRHADVIPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 466
Qy 362 GVAKAVDFIPVESMETMR 380
Db 467 GVAKAVDFIPVESMETMR 485

RESULT 12
US-10-191-966-4
; Sequence 4, Application US/10191966
; Publication No. US20030175692A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191.966
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263.933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: ;
US-10-191-966-4

Query Match 94.7%; Score 1881; DB 14; Length 1692;
Best Local Similarity 93.1%; Pred. No. 6.5e-176;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy 2 LLTSLPYKVLARLIWLOYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 107 LLTSLPYKVLARLIWLOYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 166
Qy 62 ITKLLAIFGFLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
Db 167 ITKLLAIFGFLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGT 226
Qy 122 YVYDHLTPLDQWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 227 YIYNHLTPLDQWAHAGLRDLAVAVEPVIFSDMETKIITWGADTAACGDIISGLPVSARRG 286
Qy 182 REILGPADNFEQGWRLAPITAYSQOTRGLLCIITSLTGRDKNQVEGEVQVSTATQ 241
Db 287 KEILGPADNFEQGWRLAPITAYSQOTRGLLCIITSLTGRDKNQVEGEVQVSTATQ 346
Qy 242 SFLATCNGVCWTVYHGAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 301
Db 347 SFLATCNGVCWTVYHGAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 406
Qy 302 SDLYLVTRHADVIPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 361
Db 407 SDLYLVTRHADVIPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 466
Qy 362 GVAKAVDFIPVESMETMR 380
Db 467 GVAKAVDFIPVESMETMR 485

RESULT 13
US-09-919-901-2

; Sequence 2, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919.901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263.933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: ;
US-09-919-901-2

Query Match 94.7%; Score 1881; DB 10; Length 2307;
Best Local Similarity 93.1%; Pred. No. 9.9e-176;
Matches 353; Conservative 12; Mismatches 14; Indels 0; Gaps 0;

Qy 2 LLTSLPYKVLARLIWLOYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 61
Db 199 LLTSLPYKVLARLIWLOYLITRVEAHLQVWIPPLNVRGGRDAIILLTCAVHPELIFD 258
Qy 62 ITKLLAIFGFLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGT 121
Db 259 ITKLLAIFGFLMWLOAGITKVPYFVRAQGLIRACMLVRKAAGHYVQMAFMKLAALTGT 318
Qy 122 YVYDHLTPLDQWAHAGLRDLAVAVEPVIFSDMEVKIITWGADTAACGDIISGLPVSARRG 181
Db 319 YIYNHLTPLDQWAHAGLRDLAVAVEPVIFSDMETKIITWGADTAACGDIISGLPVSARRG 378
Qy 182 REILGPADNFEQGWRLAPITAYSQOTRGLLCIITSLTGRDKNQVEGEVQVSTATQ 241
Db 379 KEILGPADNFEQGWRLAPITAYSQOTRGLLCIITSLTGRDKNQVEGEVQVSTATQ 438
Qy 242 SFLATCNGVCWTVYHGAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 301
Db 439 SFLATCNGVCWTVYHGAGSKTLAGPKGPTQMTYTNVDQDLVGMQAPPGARSLTPCTCGS 498
Qy 302 SDLYLVTRHADVIPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 361
Db 499 SDLYLVTRHADVIPVRRGDSRGLSPRPVSYLKGSSGGLPCPSGHAVGIFRAAVCTR 558
Qy 362 GVAKAVDFIPVESMETMR 380
Db 559 GVAKAVDFIPVESMETMR 577

RESULT 14
US-10-191-966-2
; Sequence 2, Application US/10191966
; Publication No. US20030175692A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191.966
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263.933
; PRIOR FILING DATE: 1999-03-08

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 20.4292 Seconds
(without alignments)

1286.219 Million cell updates/sec

Title: US-10-650-585-13

Perfect score: 1842

Sequence: 1 AHQVWIPPLNVRGGRDAII.....RGVAKAVDFIPVSEMETTMR 352

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1842	100.0	352	4	US-10-017-736C-13
2	1842	100.0	380	4	US-10-017-736C-12
3	1842	100.0	393	4	US-10-017-736C-11
4	1842	100.0	409	4	US-10-017-736C-2
5	1778	96.5	341	4	US-10-017-736C-14
6	1766	95.9	2201	4	US-09-539-601-6
7	1766	95.9	2201	4	US-09-539-601-15
8	1766	95.9	2201	4	US-10-029-907-3
9	1766	95.9	3010	4	US-09-539-601-3
10	1766	95.9	3010	4	US-09-539-601-21
11	1766	95.9	3010	4	US-09-539-601-27
12	1759	95.5	3010	4	US-09-539-601-33
13	1757	95.4	1692	3	US-09-263-933-4
14	1757	95.4	1692	4	US-09-919-901-4
15	1757	95.4	1692	4	US-10-191-966-4
16	1757	95.4	2307	3	US-09-263-933-2
17	1757	95.4	2307	4	US-09-919-901-2
18	1757	95.4	2307	4	US-10-191-966-2
19	1754	95.2	1692	3	US-09-263-933-11
20	1754	95.2	1692	4	US-09-919-901-11
21	1754	95.2	1692	4	US-10-191-966-11
22	1754	95.2	2307	3	US-09-263-933-9
23	1754	95.2	2307	4	US-09-919-901-9
24	1754	95.2	2307	4	US-10-191-966-9
25	1748	94.9	3010	3	US-09-014-416-3
26	1745	94.7	1692	3	US-09-263-933-18
27	1745	94.7	1692	4	US-09-919-901-18

28	1745	94.7	1692	4	US-10-191-966-18	Sequence 18, Appl
29	1745	94.7	2307	3	US-09-263-933-16	Sequence 16, Appl
30	1745	94.7	2307	4	US-09-919-901-16	Sequence 16, Appl
31	1745	94.7	2307	4	US-10-191-966-16	Sequence 16, Appl
32	1699	92.2	2013	1	US-08-324-977-12	Sequence 12, Appl
33	1699	92.2	2013	2	US-08-384-616-12	Sequence 12, Appl
34	1699	92.2	2013	2	US-08-904-686A-12	Sequence 12, Appl
35	1699	92.2	2013	3	US-09-315-850-12	Sequence 12, Appl
36	1699	92.2	2201	3	US-08-952-981A-2	Sequence 2, Appl
37	1699	92.2	2620	1	US-08-324-977-32	Sequence 32, Appl
38	1699	92.2	2620	2	US-08-384-616-32	Sequence 32, Appl
39	1699	92.2	2620	2	US-08-904-686A-32	Sequence 32, Appl
40	1699	92.2	2620	3	US-09-315-850-32	Sequence 32, Appl
41	1699	92.2	2621	1	US-08-324-977-36	Sequence 36, Appl
42	1699	92.2	2621	2	US-08-384-616-36	Sequence 36, Appl
43	1699	92.2	2621	2	US-08-904-686A-36	Sequence 36, Appl
44	1699	92.2	2621	3	US-09-315-850-36	Sequence 36, Appl
45	1699	92.2	3010	1	US-08-324-977-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-10-017-736C-13
; Sequence 13, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-13

Query Match 100.0%; Score 1842; DB 4; Length 352;									
Best Local Similarity 100.0%; Pred. No. 1.8e-179;									
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;									
Qy	1	AHLQWIPPLNVRGGRDAIILLTC	AVHPELI	FDITKLLAI	FGPLMWLQAGITKVPYFVR	60			
Db	1	AHLQWIPPLNVRGGRDAIILLTC	AVHPELI	FDITKLLAI	FGPLMWLQAGITKVPYFVR	60			
Qy	61	AQGLIRACMLVRKAAGHYVQMAFMKLAAL	TGTYVDHL	TPLQDWAHAGLRDLA	VAVEPV	120			
Db	61	AQGLIRACMLVRKAAGHYVQMAFMKLAAL	TGTYVDHL	TPLQDWAHAGLRDLA	VAVEPV	120			
Qy	121	IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGWELLAPITAYSQ	180						
Db	121	IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPDNFEQGWELLAPITAYSQ	180						
Qy	181	QTRGLGCIITSTLGRDKNOVEGEVQVWSTATQSFATCVNGVTCVTFHAGSKTLGAPK	240						
Db	181	QTRGLGCIITSTLGRDKNOVEGEVQVWSTATQSFATCVNGVTCVTFHAGSKTLGAPK	240						
Qy	241	GPITQMTYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVI	PVRRRGDSRGSLLS	300					
Db	241	GPITQMTYTNVDQLVGNQAPPGARSMTPTCTCGSSDLYLVTRHADVI	PVRRRGDSRGSLLS	300					
Qy	301	PRPVSYLKSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVSEMETTMR	352						

```
Db 301 PRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11

Query Match 100.0%; Score 1842; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 2.2e-179;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 2
US-10-017-736C-12
; Sequence 12, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-12

Query Match 100.0%; Score 1842; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 2e-179;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVR 60
Db 29 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVR 88
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPVP 120
Db 89 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPVP 148
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLAPITAYSQ 180
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLAPITAYSQ 208
Qy 181 QTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLGPK 240
Db 209 QTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLGPK 269
Qy 241 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGDSRGSLLS 300
Db 269 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGDSRGSLLS 328
Qy 301 PRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 329 PRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 3
US-10-017-736C-11
; Sequence 11, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25

Qy 1 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVR 60
Db 46 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVR 105
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPVP 120
Db 106 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPVP 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLAPITAYSQ 180
Db 342 PRPVSYLKGSSGGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393

RESULT 4
US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match 100.0%; Score 1842; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 2.3e-179;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVR 60
Db 46 AHLQVWIPPLNVRGGRDAIILLTCAVHPELIFDITKLLAIFGLPMLVQAGITKVPYFVR 105
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPVP 120
Db 106 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGRLDLAVAPVP 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLAPITAYSQ 180
```

```
Db 166 IFSDMEVKIITWGADTAACGDIISGLPVSARRGRIILGPADNPEGGQWRLLAPITAYSQ 225
Qy 181 QTRGLLGCIIITSLTRDKNOVEGEVQVVSSTATQSFLLATCVNGVCWTVFHAGSXTLAGPK 240
Db 226 QTRGLLGCIIITSLTRDKNOVEGEVQVVSSTATQSFLLATCVNGVCWTVFHAGSXTLAGPK 285
Qy 241 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 286 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 345
Qy 301 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 5
US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: Fast-Seq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-14

Query Match 96.5%; Score 1778; DB 4; Length 341;
Best Local Similarity 100.0%; Pred. No. 5.9e-173; Mismatches 0; Indels 0; Gaps 0;
Matches 341; Conservative 0;

Qy 12 VRGRDAIILLTCAVHPELIFDITKLLAIFGLPLMWLQAGITKVPYFVRAQGLIRACMLV 71
Db 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGLPLMWLQAGITKVPYFVRAQGLIRACMLV 60
Qy 72 RKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPVI FSDMEVKIIT 131
Db 61 RKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPVI FSDMEVKIIT 120
Qy 132 WGADTAACGDIISGLPVSARRGRIILGPADNPEGGQWRLLAPITAYSQOTRGLLGCIIIT 191
Db 121 WGADTAACGDIISGLPVSARRGRIILGPADNPEGGQWRLLAPITAYSQOTRGLLGCIIIT 180
Qy 192 SLTRDKNOVEGEVQVVSSTATQSFLLATCVNGVCWTVFHAGSXTLAGPKPIQMTYTNVD 251
Db 181 SLTRDKNOVEGEVQVVSSTATQSFLLATCVNGVCWTVFHAGSXTLAGPKPIQMTYTNVD 240
Qy 252 QDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSRPVSYLKGSS 311
Db 241 QDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSRPVSYLKGSS 300
Qy 312 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 301 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341

RESULT 6
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
```

```
; GENERAL INFORMATION:
; APPLICANT: Bartschlagher, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
; US-09-539-601-6

Query Match 95.9%; Score 1766; DB 4; Length 2201;
Best Local Similarity 94.3%; Pred. No. 1.6e-170; Mismatches 9; Indels 0; Gaps 0;
Matches 332; Conservative 11;

Qy 1 AHLQVWIPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGLPLMWLQAGITKVPYFVR 60
Db 46 AHLQVWIPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGLPLMWLQAGITKVPYFVR 105
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 120
Db 106 AHGLIRACMLVRKAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGRIILGPADNPEGGQWRLLAPITAYSQ 180
Db 166 VFSDMETKVIITWGADTAACGDIISGLPVSARRGRIILGPADNPEGGQWRLLAPITAYSQ 225
Qy 181 QTRGLLGCIIITSLTRDKNOVEGEVQVVSSTATQSFLLATCVNGVCWTVFHAGSXTLAGPK 240
Db 226 QTRGLLGCIIITSLTRDKNOVEGEVQVVSSTATQSFLLATCVNGVCWTVFHAGSXTLAGPK 285
Qy 241 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 286 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 345
Qy 301 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 7
US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagher, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
; US-09-539-601-15

Query Match 95.9%; Score 1766; DB 4; Length 2201;
Best Local Similarity 94.3%; Pred. No. 1.6e-170; Mismatches 9; Indels 0; Gaps 0;
Matches 332; Conservative 11;

Qy 1 AHLQVWIPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGLPLMWLQAGITKVPYFVR 60
Db 46 AHLQVWIPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGLPLMWLQAGITKVPYFVR 105
```

```
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 106 AHGILIRACMLVRKVAGGHYVQMAFMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPDNPEGQGWRLLPITAYSQ 180
Db 166 VFSDMETKVIITWGADTAACGDIILGLPVSARRGREIHLGPDASLEGQGWRLLPITAYSQ 225
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 240
Db 226 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 285
Qy 241 GPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 300
Db 286 GPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 345
Qy 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 8
US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3
```

```
Query Match 95.9%; Score 1766; DB 4; Length 2201;
Best Local Similarity 94.3%; Pred. No. 1.6e-170;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLQWIPPLNVGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVQAGITKVPYFVR 60
Db 46 AHLQWIPPLNVGRDAVILLTCAIHPELIFTITKLLLAIFGLPMLVQAGITKVPYFVR 105
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 106 AHGILIRACMLVRKVAGGHYVQMAFMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPDNPEGQGWRLLPITAYSQ 180
Db 166 VFSDMETKVIITWGADTAACGDIILGLPVSARRGREIHLGPDASLEGQGWRLLPITAYSQ 225
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 240
Db 226 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 285
Qy 241 GPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 300
Db 286 GPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 345
```

```
Qy 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 9
US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagel, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-3

Query Match 95.9%; Score 1766; DB 4; Length 3010;
Best Local Similarity 94.3%; Pred. No. 2.5e-170;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLQWIPPLNVGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVQAGITKVPYFVR 60
Db 855 AHLQWIPPLNVGRDAVILLTCAIHPELIFTITKLLLAIFGLPMLVQAGITKVPYFVR 914
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 915 AHGILIRACMLVRKVAGGHYVQMAFMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 974
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPDNPEGQGWRLLPITAYSQ 180
Db 975 VFSDMETKVIITWGADTAACGDIILGLPVSARRGREIHLGPDASLEGQGWRLLPITAYSQ 1034
Qy 181 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 240
Db 1035 QTRGLLGCIIITSLTGRDNQVEGEVQVSTATQSFATCVNGVCWTYFHGAGSKTLAGPK 1094
Qy 241 GPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 300
Db 1095 GPITQMTYTNVDQDLVGNQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRRGRSGSLLS 1154
Qy 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 1155 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 10
US-09-539-601-21
; Sequence 21, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartschlagel, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-21
```



```
Query Match      95.9%; Score 1766; DB 4; Length 3010;
Best Local Similarity 94.3%; Pred. No. 2.5e-170;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLQWIPPLNVRGGRDAIILLTCAVHPELIFDTIKLLAIFGPMVLQAGITKVPYFVR 60
Db 855 AHLQWIPPLNVRGGRDAVILLTCAIHPELIFTITIKLLAILGLPMLVQAGITKVPYFVR 914
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 915 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 974
Qy 121 IFSMEVKIITWGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQ 180
Db 975 VFSDMETKVIITWGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQ 1034
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLAGPK 240
Db 1035 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLAGPK 1094
Qy 241 GPITQMTYNNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 1095 GPITQMTYNNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 1154
Qy 301 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 1155 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 11
US-09-539-601-27
; Sequence 27, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 27
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-27

Query Match      95.9%; Score 1766; DB 4; Length 3010;
Best Local Similarity 94.3%; Pred. No. 2.5e-170;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLQWIPPLNVRGGRDAIILLTCAVHPELIFDTIKLLAIFGPMVLQAGITKVPYFVR 60
Db 855 AHLQWIPPLNVRGGRDAVILLTCAIHPELIFTITIKLLAILGLPMLVQAGITKVPYFVR 914
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 915 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 974
Qy 121 IFSMEVKIITWGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQ 180
Db 975 VFSDMETKVIITWGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQ 1034
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLAGPK 240
Db 1035 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLAGPK 1094
Qy 241 GPITQMTYNNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 1095 GPITQMTYNNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 1154
```

```
Qy 301 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 1155 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 12
US-09-539-601-33
; Sequence 33, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 33
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-33

Query Match      95.5%; Score 1759; DB 4; Length 3010;
Best Local Similarity 94.0%; Pred. No. 1.3e-169;
Matches 331; Conservative 11; Mismatches 10; Indels 0; Gaps 0;

Qy 1 AHLQWIPPLNVRGGRDAIILLTCAVHPELIFDTIKLLAIFGPMVLQAGITKVPYFVR 60
Db 855 AHLQWIPPLNVRGGRDAVILLTCAIHPELIFTITIKLLAILGLPMLVQAGITKVPYFVR 914
Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 915 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 974
Qy 121 IFSMEVKIITWGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQ 180
Db 975 VFSDMETKVIITWGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQ 1034
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLAGPK 240
Db 1035 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLAGPK 1094
Qy 241 GPITQMTYNNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 1095 GPITQMTYNNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 1154
Qy 301 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 1155 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 13
US-09-263-933-4
; Sequence 4, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 4
```

```
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; US-09-263-933-4

Query Match          95.4%; Score 1757; DB 3; Length 1692;
Best Local Similarity 93.8%; Pred. No. 8.9e-170; Mismatches 10; Indels 0; Gaps 0;
Matches 330; Conservative 12;

Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGFLMVLQAGITKVPYFVR 60
Db 134 AHLHWIPLNARGRDAIILLMCAVHPELIFDITKLLIALLGLPLMWLQAGITRVPYFVR 193

Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 194 AQLIHACMLVRKVAGHYVQMAFMKLGALTGTYYIYNHLTPLRDWAHAGRLDLAVAVEPV 253

Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOWRLLAPITAYSQ 180
Db 254 VFSDMETKIITWGADTAACGDIILGLPVSARRGKEILLGPADSLGEGRWRLAPITAYSQ 313

Qy 181 QTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQSFLATCVNGVCWTTFVHGAGSKTLGAPK 240
Db 314 QTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQSFLATCVNGVCWTTFVHGAGSKTLGAPK 373

Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 374 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 433

Qy 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 434 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485
```

```
RESULT 14
US-09-919-901-4
; Sequence 4, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; PRIOR FILING DATE: 2001-08-02
; PRIOR FILING DATE: 1999-02-08
; PRIOR FILING DATE: 1999-02-08
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4
```

```
Query Match          95.4%; Score 1757; DB 4; Length 1692;
Best Local Similarity 93.8%; Pred. No. 8.9e-170; Mismatches 10; Indels 0; Gaps 0;
Matches 330; Conservative 12;

Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGFLMVLQAGITKVPYFVR 60
Db 134 AHLHWIPLNARGRDAIILLMCAVHPELIFDITKLLIALLGLPLMWLQAGITRVPYFVR 193

Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 194 AQLIHACMLVRKVAGHYVQMAFMKLGALTGTYYIYNHLTPLRDWAHAGRLDLAVAVEPV 253

Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGOWRLLAPITAYSQ 180
Db 254 VFSDMETKIITWGADTAACGDIILGLPVSARRGKEILLGPADSLGEGRWRLAPITAYSQ 313

Qy 181 QTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQSFLATCVNGVCWTTFVHGAGSKTLGAPK 240
Db 314 QTRGLLGCIIITSLTGRDKNQVEGEVQVSTATQSFLATCVNGVCWTTFVHGAGSKTLGAPK 373

Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Db 374 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 433

Qy 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 434 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485
```

```
RESULT 15
US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; PRIOR FILING DATE: 2002-07-10
; PRIOR FILING DATE: 1999-03-08
; PRIOR FILING DATE: 1999-03-08
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-191-966-4
```

```
Query Match          95.4%; Score 1757; DB 4; Length 1692;
Best Local Similarity 93.8%; Pred. No. 8.9e-170; Mismatches 10; Indels 0; Gaps 0;
Matches 330; Conservative 12;

Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLAIFGFLMVLQAGITKVPYFVR 60
Db 134 AHLHWIPLNARGRDAIILLMCAVHPELIFDITKLLIALLGLPLMWLQAGITRVPYFVR 193

Qy 61 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 194 AQLIHACMLVRKVAGHYVQMAFMKLGALTGTYYIYNHLTPLRDWAHAGRLDLAVAVEPV 253
```

Search completed: May 26, 2005, 22:03:42
Job time : 21.4292 secs

Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 61.2877 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-13

Perfect score: 1842

Sequence: 1 AHLQWIPPLNVRGRDAII.....RGVAKAVDFIPVSMETTM 352

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1842	100.0	352	13	US-10-017-736-13
2	1842	100.0	352	15	US-10-650-585-13
3	1842	100.0	380	13	US-10-017-736-12
4	1842	100.0	380	15	US-10-650-585-12
5	1842	100.0	393	13	US-10-017-736-11
6	1842	100.0	393	15	US-10-650-585-11
7	1842	100.0	409	13	US-10-017-736-2
8	1842	100.0	409	15	US-10-650-585-2
9	1778	96.5	341	13	US-10-017-736-14
10	1778	96.5	341	15	US-10-650-585-14
11	1766	95.9	2201	13	US-10-029-907-3
12	1766	95.9	2201	14	US-10-309-561-3
13	1766	95.9	2201	16	US-10-789-355-3

14	1766	95.9	3010	15	US-10-467-000-1	Sequence 1, Appli
15	1757	95.4	1692	10	US-09-919-901-4	Sequence 4, Appli
16	1757	95.4	1692	14	US-10-191-966-4	Sequence 4, Appli
17	1757	95.4	2307	10	US-09-919-901-2	Sequence 2, Appli
18	1757	95.4	2307	14	US-10-191-966-2	Sequence 2, Appli
19	1754	95.2	1692	10	US-09-919-901-11	Sequence 11, Appli
20	1754	95.2	1692	14	US-10-191-966-11	Sequence 11, Appli
21	1754	95.2	2307	10	US-09-919-901-9	Sequence 9, Appli
22	1754	95.2	2307	14	US-10-191-966-9	Sequence 9, Appli
23	1745	94.7	1692	10	US-09-919-901-18	Sequence 18, Appli
24	1745	94.7	1692	14	US-10-191-966-18	Sequence 18, Appli
25	1745	94.7	2307	10	US-09-919-901-16	Sequence 16, Appli
26	1745	94.7	2307	14	US-10-191-966-16	Sequence 16, Appli
27	1744	94.7	3010	16	US-10-333-449A-34	Sequence 34, Appli
28	1699	92.2	2201	13	US-10-085-476-2	Sequence 2, Appli
29	1619	87.9	3011	9	US-09-742-659-4	Sequence 4, Appli
30	1619	87.9	3011	10	US-09-891-894-3	Sequence 3, Appli
31	1619	87.9	3011	14	US-10-184-150-3	Sequence 3, Appli
32	1619	87.9	3012	15	US-10-328-997-3	Sequence 3, Appli
33	1619	87.9	3012	9	US-09-238-076-2	Sequence 2, Appli
34	1619	87.9	3012	10	US-09-995-937-2	Sequence 2, Appli
35	1619	87.9	3012	10	US-09-917-563-2	Sequence 2, Appli
36	1616	87.7	3011	9	US-09-916-359-2	Sequence 2, Appli
37	1616	87.7	3011	15	US-10-296-734-406	Sequence 406, App
38	1616	87.7	3011	16	US-10-445-724-2	Sequence 2, Appli
39	1615	87.7	3011	9	US-09-238-076-20	Sequence 20, Appli
40	1615	87.7	3011	10	US-09-995-937-20	Sequence 20, Appli
41	1615	87.7	3011	10	US-09-917-563-20	Sequence 20, Appli
42	1612	87.5	3011	9	US-09-952-572-9	Sequence 9, Appli
43	1612	87.5	3011	9	US-09-747-419-20	Sequence 20, Appli
44	1612	87.5	3011	14	US-10-259-275-20	Sequence 20, Appli
45	1612	87.5	3011	15	US-10-189-359-14	Sequence 14, Appli

ALIGNMENTS

RESULT 1

US-10-017-736-13
; Sequence 13, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-13

Query Match	100.0%;	Score 1842;	DB 13;	Length 352;
Best Local Similarity	100.0%;	Pred. No. 1.6e-174;		
Matches 352;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	AHLQWIPPLNVRGRDAIIITCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVR	60	
Db	1	AHLQWIPPLNVRGRDAIIITCAVHPELIFDITKLLLAIFGPLMVLQAGITKVPYFVR	60	
Qy	61	AQGLIRACMLVRKAGGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGRLDVAVEPV	120	
Db	61	AQGLIRACMLVRKAGGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGRLDVAVEPV	120	
Qy	121	IFSDMEVKIITWGDATTAACGDIISGLPVSARRGRIILGPDNPEGOGWRLLAPITAYSQ	180	
Db	121	IFSDMEVKIITWGDATTAACGDIISGLPVSARRGRIILGPDNPEGOGWRLLAPITAYSQ	180	

```
Qy 181 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFLLATCVNGVCTVPHGAGSKTLGAPK 240
Db 181 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFLLATCVNGVCTVPHGAGSKTLGAPK 240
Qy 241 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 300
Db 241 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 300
Qy 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 352
Db 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 352
```

RESULT 2

```
US-10-650-585-13
; Sequence 13, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
; US-10-650-585-13
```

```
Query Match 100.0%; Score 1842; DB 15; Length 352;
Best Local Similarity 100.0%; Pred. No. 1.6e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 AHLQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGFLMWLQAGITKVPYFVR 60
Db 1 AHLQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGFLMWLQAGITKVPYFVR 60
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 120
Db 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 120
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGQWRL LAPITAYSQ 180
Db 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGQWRL LAPITAYSQ 180
Qy 181 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFLLATCVNGVCTVPHGAGSKTLGAPK 240
Db 181 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFLLATCVNGVCTVPHGAGSKTLGAPK 240
Qy 241 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 300
Db 241 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 300
Qy 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 352
Db 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 352
```

RESULT 3

```
US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
```

```
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-12
```

```
Query Match 100.0%; Score 1842; DB 13; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.8e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 AHLQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGFLMWLQAGITKVPYFVR 60
Db 29 AHLQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGFLMWLQAGITKVPYFVR 88
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 120
Db 89 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 148
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGQWRL LAPITAYSQ 180
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGQWRL LAPITAYSQ 208
Qy 181 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFLLATCVNGVCTVPHGAGSKTLGAPK 240
Db 209 QTRGLGCIITSLTGRDKNQVEGEVQVVSSTATQSFLLATCVNGVCTVPHGAGSKTLGAPK 268
Qy 241 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 300
Db 269 GPITQMTYNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 328
Qy 301 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 352
Db 329 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAAVCTRGVAKAVDFIPVESMETTMR 380
```

RESULT 4

```
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
; US-10-650-585-12
```

```
Query Match 100.0%; Score 1842; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.8e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 AHLQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGFLMWLQAGITKVPYFVR 60
Db 29 AHLQVWIPPLNVGRDRAIILLTCAVHPELIFDITKLLLAIFGFLMWLQAGITKVPYFVR 88
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 120
Db 89 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 148
```

```
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLAPITAYSQ 180
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLAPITAYSQ 208
Qy 181 QTRGLLGCIIITSLTRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLGPK 240
Db 209 QTRGLLGCIIITSLTRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLGPK 268
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 300
Db 269 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 328
Qy 301 PRPVSYLKGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 329 PRPVSYLKGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 5
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

Query Match 100.0%; Score 1842; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 1.9e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 60
Db 42 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 101
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 102 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 161
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLAPITAYSQ 180
Db 162 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLAPITAYSQ 221
Qy 181 QTRGLLGCIIITSLTRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLGPK 240
Db 222 QTRGLLGCIIITSLTRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLGPK 281
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 300
Db 282 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 341
Qy 301 PRPVSYLKGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 342 PRPVSYLKGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393

RESULT 6
US-10-017-736-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
```

```
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11

Query Match 100.0%; Score 1842; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 1.9e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 60
Db 42 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 101
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 120
Db 102 AOGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAVEPV 161
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLAPITAYSQ 180
Db 162 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLAPITAYSQ 221
Qy 181 QTRGLLGCIIITSLTRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLGPK 240
Db 222 QTRGLLGCIIITSLTRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLGPK 281
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 300
Db 282 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLS 341
Qy 301 PRPVSYLKGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 342 PRPVSYLKGSGGGLLCPSPGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393

RESULT 7
US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2

Query Match 100.0%; Score 1842; DB 13; Length 409;
Best Local Similarity 100.0%; Pred. No. 2e-174;
Matches 352; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 60
Db 46 AHLQVWIPPLNVRGRDAIILLTCAVHPELIFDITKLLLAIFGLPMLVLAQGITKVPYFVR 105
```

Qy	61	AQGLIRACMLVRKAAGHYVQMAFWKLAALTGTVYDHLTFLQDWAHAGLRLDAVAVP	120
Db	106	AQGLIRACMLVRKAAGHYVQMAFWKLAALTGTVYDHLTFLQDWAHAGLRLDAVAVP	165
Qy	121	IFSDMEVKLIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGRWLLAPITAYSQ	180
Db	166	IFSDMEVKLIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGRWLLAPITAYSQ	225
Qy	181	QTRGLLGCIITSLTGRDNKQVEGEVQVNSTATQSFATCVNGVCWTVPHGAGSKTLGPK	240
Db	226	QTRGLLGCIITSLTGRDNKQVEGEVQVNSTATQSFATCVNGVCWTVPHGAGSKTLGPK	285
Qy	241	GPIQTMTNVDDDLVGWQAPPGARSMTPECTCGSSDLYLVRHADVIPVRRRGDSRGSLLS	300
Db	286	GPIQTMTNVDDDLVGWQAPPGARSMTPECTCGSSDLYLVRHADVIPVRRRGDSRGSLLS	345
Qy	301	PRPVSYLKSGSGGPLLCPSHGAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	352
Db	346	PRPVSYLKSGSGGPLLCPSHGAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	397

```

RESULT 8
US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-2

```

```

US-10-017-736-14
; Sequence 14, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-14

```

Query Match	96.5%	Score 1778;	DB 13;	Length
Best Local Similarity	100.0%;	Prod. No. 3.6e-168;		
Matches 341;	Conservative 0;	Mismatches 0;	Indel	
Qy	12	VRGRDAIILLTCAVHPPELIDITKLLALFGLPWLVLQAGITKVPV		
Db	1	VRGRDAIIIIITCAVHPPELIDITKLLALFGLPWLVLQAGITKVPV		
Qy	72	RKAAGGHYVQWAFMKLAALTGTVYVDHLTFLQDWAHAGLRDLA		
Db	61	RKAAGGHYVQWAFMKLAALTGTVYVDHLTFLQDWAHAGLRDLA		
Qy	132	WGADTAACGDIIISGLPVSARRGREILIGLPADNFEQGQWRLLAPIT		
Db	121	WGADTAACGDIIISGLPVSARRGREILIGLPADNFEQGQWRLLAPIT		
Qy	192	SLTGRDNKNVEGEVQVVSTATQSFATCVNGVQWCVTFPHGAGSKTL		
Db	181	SLTGRDNKNVEGEVQVVSTATQSFATCVNGVQWCVTFPHGAGSKTL		
Qy	252	QDLVGWQAPPGARSMTCTCGSSDLYLVLRHADVIPIVRRRGDSRG		
Db	241	QDLVGWQAPPGARSMTCTCGSSDLYLVLRHADVIPIVRRRGDSRG		
Qy	312	GGPILLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR		352
Db	301	GGPILLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR		341

Qy	1	AHLQVWJLPPLNVNRGRDAIILLTCAVHPBELLPDIITKLLLAIFGPPUWVLOAGIKRKYPIFYR	60
Db	46	AHLQVWTIPPLNVNRGRDAIILLTCAVHPBELIPDIITKLLLAIFGPPUWVLOAGITKYPIFYR	105
Qy	61	AQGLIRACMLVRKAAGGHYQVMAFWKLAALITCTYVYVDHLITPLQDWAHAGRLDLAVAVEPV	120
Db	106	AQGLIRACMLVRKAAGGHYQVMAFWKLAALITGYVYVDHLITPLQDWAHAGRLDLAVAVEPV	165
Qy	121	IFSDMEVKIITWGADTAACGDIISGLPSARRGREILLGPADNPFQGWRLAPITAYSQ	180
Db	166	IFSDMEVKIITWGADTAACGDIISGLPSARRGREILLGPADNPFQGWRLAPITAYSQ	225
Qy	181	QTRGLLGCIITSLTGRDNKQVEGEVQVYSTQTSFLATCVNGVCWTVFHGAGSKTLAGPK	240
Db	226	QTRGLLGCIITSLTGRDNKQVEGEVQVYSTQTSFLATCVNGVCWTVFHGAGSKTLAGPK	285
Qy	241	GPITQMTYNVDQDLVGWQAPPGARSMTPCTCGSSDLYLVTRHADYIPVRRRGDSRGSLLS	300
Db	286	GPITQMTYNVDQDLVGWQAPPGARSMTPCTCGSSDLYLVTRHADYIPVRRRGDSRGSLLS	345
Qy	301	PRPVSYLKGSSGGPILLCPSGHAVGIFRAAVCTRGVAKAVDFIPVSEMTTMR	352
Db	346	PRPVSYLKGSSGGPILLCPSGHAVGIFRAAVCTRGVAKAVDFIPVSEMTTMR	397

Matches	341	Conservative	0	Mismatches	0	Indels	0	Gaps	0

RESULT 9									

Qy 12 VRGRDAIILLTCAVHDELIPDITKLLLAIFGPMVLQAGITKVPYFVRQAQGLIRACWLV 71
Db 1 VRGRDAIILLTCAVHDELIPDITKLLLAIFGPMVLQAGITKVPYFVRQAQGLIRACWLV 60
Qy 72 RKAAGGHVQWMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPFI FSDMEVKIIT 131
Db 61 RKAAGGHVQWMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPFI FSDMEVKIIT 120
Qy 132 WGADTAACGDIISGLPVSAARRGREILLGPADNPFEGCGWRLLAPITAYSQOTRGLLGCIIIT 191
Db 121 WGADTAACGDIISGLPVSAARRGREILLGPADNPFEGCGWRLLAPITAYSQOTRGLLGCIIIT 180
Qy 192 SLTGRDNQVGEVQVVTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMYTNVD 251
Db 181 SLTGRDNQVGEVQVVTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPITQMYTNVD 240
Qy 252 QDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVI PVRRRGDSRGSLLSPRPVSYLKSS 311
Db 241 QDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVI PVRRRGDSRGSLLSPRPVSYLKSS 300
Qy 312 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352
Db 301 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341

RESULT 11

US-10-029-907-3
; Sequence 3, Application US/10029907
; Publication No. US20020142350A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match 95.9%; Score 1766; DB 13; Length 2201;
Best Local Similarity 94.3%; Pred. No. 7.2e-166;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;
Qy 1 AHLQWIPPLNVRGGRDAIILLTCAVHPELI FDIITKLLLAIFGPMVLQAGITKVPYFVR 60
Db 46 AHLQWIPPLNVRGGRDAVILLTCAIHPELI FTITKILLAILGLPLMLQAGITKVPYFVR 105
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 120
Db 106 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYVDHLTPLRDLWAHAGLRDLAVAVEPV 165
Qy 121 IFSMEVKIITWGAADTAACGDIISGLPVSAARRGREILLGPADNPFEGCGWRLLAPITAYSQ 180
Db 166 VFSMETKVIITWGAADTAACGDIISGLPVSAARRGREIHLGPADSLGCGWRLLAPITAYSQ 225
Qy 181 QTRGLLGCIIITSLTGRDNQVGEVQVVTATQSFATCVNGVCWTVFHGAGSKTLAGPK 240
Db 226 QTRGLLGCIIITSLTGRDNQVGEVQVVTATQSFATCVNGVCWTVFHGAGSKTLAGPK 285
Qy 241 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVI PVRRRGDSRGSLLS 300
Db 286 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVI PVRRRGDSRGSLLS 345
Qy 301 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 397

RESULT 13

US-10-789-355-3
; Sequence 3, Application US/10789355

Qy 241 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVI PVRRRGDSRGSLLS 300
Db 286 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVI PVRRRGDSRGSLLS 345
Qy 301 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 397

RESULT 12

US-10-309-561-3
; Sequence 3, Application US/10309561
; Publication No. US20030148348A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/309,561
; CURRENT FILING DATE: 2002-12-04
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-309-561-3

Query Match 95.9%; Score 1766; DB 14; Length 2201;
Best Local Similarity 94.3%; Pred. No. 7.2e-166;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLQWIPPLNVRGGRDAIILLTCAVHPELI FDIITKLLLAIFGPMVLQAGITKVPYFVR 60
Db 46 AHLQWIPPLNVRGGRDAVILLTCAIHPELI FTITKILLAILGLPLMLQAGITKVPYFVR 105
Qy 61 AOGLIRACMLVRKAAGHYVQMAFMKLAALGTYYVDHLTPLQDWAHAGLRDLAVAVEPV 120
Db 106 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYVDHLTPLRDLWAHAGLRDLAVAVEPV 165
Qy 121 IFSMEVKIITWGAADTAACGDIISGLPVSAARRGREILLGPADNPFEGCGWRLLAPITAYSQ 180
Db 166 VFSMETKVIITWGAADTAACGDIISGLPVSAARRGREIHLGPADSLGCGWRLLAPITAYSQ 225
Qy 181 QTRGLLGCIIITSLTGRDNQVGEVQVVTATQSFATCVNGVCWTVFHGAGSKTLAGPK 240
Db 226 QTRGLLGCIIITSLTGRDNQVGEVQVVTATQSFATCVNGVCWTVFHGAGSKTLAGPK 285
Qy 241 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVI PVRRRGDSRGSLLS 300
Db 286 GPITQMYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLVLTTRHADVI PVRRRGDSRGSLLS 345
Qy 301 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKSSGGPGLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 397

```
; Publication No. US20040180333A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/789,355
; PRIOR FILING DATE: 2004-02-27
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
; US-10-789-355-3

Query Match          95.9%; Score 1766; DB 16; Length 2201;
Best Local Similarity 94.3%; Pred. No. 7.2e-166;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLOQWIPPLNVRGGRDAIILLTCAVHPDLIFDITKLLAIFGLPLMLVQAGITKVPYFVR 60
Db 46 AHLOQWIPPLNVRGGRDAVILLTCAIHPDLIFTITKLLAIFGLPLMLVQAGITKVPYFVR 105
Qy 61 AQLIRACMLVRKAAAGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGRLDLAVAVEPV 120
Db 106 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 165
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLLAPITAYSQ 180
Db 166 VFSDMETKVITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLLAPITAYSQ 225
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 240
Db 226 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 285
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 300
Db 286 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 345
Qy 301 PRPVSYLKGSGGSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 346 PRPVSYLKGSGGSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 14
US-10-467-000-1
; Sequence 1, Application US/10467000
; Publication No. US20040067486A1
; GENERAL INFORMATION:
; APPLICANT: De Francesco, Raffaele
; APPLICANT: Migliaccio, Giovanni
; APPLICANT: Paonessa, Giacomo
; TITLE OF INVENTION: HEPATITIS C VIRUS REPLICONS AND REPLICON
; TITLE OF INVENTION: ENHANCED CELLS
; FILE REFERENCE: ITR0003P
; CURRENT APPLICATION NUMBER: US/10/467,000
; CURRENT FILING DATE: 2003-07-21
; PRIOR APPLICATION NUMBER: PCT/EP02/00526
; PRIOR FILING DATE: 2002-01-16
; PRIOR APPLICATION NUMBER: 60/263,479

; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Con 1 HCV isolate nucleic acid
; US-10-467-000-1

Query Match          95.9%; Score 1766; DB 15; Length 3010;
Best Local Similarity 94.3%; Pred. No. 1.1e-165;
Matches 332; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 AHLOQWIPPLNVRGGRDAIILLTCAVHPDLIFDITKLLAIFGLPLMLVQAGITKVPYFVR 60
Db 855 AHLOQWIPPLNVRGGRDAVILLTCAIHPDLIFTITKLLAIFGLPLMLVQAGITKVPYFVR 914
Qy 61 AQLIRACMLVRKAAAGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGRLDLAVAVEPV 120
Db 915 AHGLIRACMLVRKAGHYVQMALMKLAALTGTYYDHLTPLRDWAHAGRLDLAVAVEPV 974
Qy 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLLAPITAYSQ 180
Db 975 VFSDMETKVITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQWRLLAPITAYSQ 1034
Qy 181 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 240
Db 1035 QTRGLGCIITSLTGRDNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 1094
Qy 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 300
Db 1095 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 1154
Qy 301 PRPVSYLKGSGGSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 1155 PRPVSYLKGSGGSGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 15
US-09-919-901-4
; Sequence 4, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
; US-09-919-901-4

Query Match          95.4%; Score 1757; DB 10; Length 1692;
Best Local Similarity 93.8%; Pred. No. 4e-165;
Matches 330; Conservative 12; Mismatches 10; Indels 0; Gaps 0;

Qy 1 AHLOQWIPPLNVRGGRDAIILLTCAVHPDLIFDITKLLAIFGLPLMLVQAGITKVPYFVR 60
Db 134 AHLEHWIPPLNARGGRDAIILLMCAVHPDLIFDITKLLAIFGLPLMLVQAGITKVPYFVR 193
```

```

Qy 61 A QGLIRACMLVRKAAGGHYVQMAFMKLAALTGTTVYDHLTPLODWAHAGLRDLAVAVEPV 120
Db 194 A QGLIHACMLVRKVAGGHYVQMAFMKLGALTGTYIYNHLTPLRDWAHAGLRDLAVAVEPV 253
Qy 121 IFSDMEVKIITWGDADTAACGDIISGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQ 180
Db 254 VFSDMETKIITWGDADTAACGDIILGLPVSARRGREILLGPADNPEGOGWRLLAPITAYSQ 313
Qy 181 QTRGLLGCIIITSLTGRDKNOVEGEVQVWVSTATQSFATCVNGVCWTVFVGAGSKTLAGPK 240
Db 314 QTRGLLGCIIITSLTGRDKNOVEGEVQVWVSTATQSFATCVNGVCWTVFVGAGSKTLAGPK 373
Qy 241 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 300
Db 374 GPITQMTYTNVDQDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIIPVRRGDSRGSLLS 433
Qy 301 PRPVSYLKGSSGGPLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
Db 434 PRPVSYLKGSSGGPLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

```

Search completed: May 26, 2005, 22:43:01
Job time : 63.4305 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 19.7908 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: US-10-650-585-14
Perfect score: 1778
Sequence: 1 VRGRDAIILLTCAVHPELI.....RGVAKAVDFIPVESMETTMR 341

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

- 1: /cgn2_6/ptodata/1/iaa/5A COMB.pep:*
- 2: /cgn2_6/ptodata/1/iaa/5B COMB.pep:*
- 3: /cgn2_6/ptodata/1/iaa/6A COMB.pep:*
- 4: /cgn2_6/ptodata/1/iaa/6B COMB.pep:*
- 5: /cgn2_6/ptodata/1/iaa/PCTUS COMB.pep:*
- 6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1778	100.0	341	4	US-10-017-736C-14
2	1778	100.0	352	4	US-10-017-736C-13
3	1778	100.0	380	4	US-10-017-736C-12
4	1778	100.0	393	4	US-10-017-736C-11
5	1778	100.0	409	4	US-10-017-736C-2
6	1702	95.7	2201	4	US-09-539-601-6
7	1702	95.7	2201	4	US-09-539-601-15
8	1702	95.7	2201	4	US-10-029-907-3
9	1702	95.7	3010	4	US-09-539-601-3
10	1702	95.7	3010	4	US-09-539-601-21
11	1702	95.7	3010	4	US-09-539-601-27
12	1698	95.5	1692	3	US-09-263-933-4
13	1698	95.5	1692	4	US-09-919-901-4
14	1698	95.5	1692	4	US-10-191-966-4
15	1698	95.5	2307	3	US-09-263-933-2
16	1698	95.5	2307	4	US-09-919-901-2
17	1698	95.5	2307	4	US-10-191-966-2
18	1695	95.3	1692	3	US-09-263-933-11
19	1695	95.3	1692	4	US-09-919-901-11
20	1695	95.3	1692	4	US-10-191-966-11
21	1695	95.3	2307	3	US-09-263-933-9
22	1695	95.3	2307	4	US-09-919-901-9
23	1695	95.3	2307	4	US-10-191-966-9
24	1695	95.3	3010	4	US-09-539-601-33
25	1687	94.9	3010	3	US-09-014-416-3
26	1686	94.8	1692	3	US-09-263-933-18
27	1686	94.8	1692	4	US-09-919-901-18

28	1686	94.8	1692	4	US-10-191-966-18	Sequence 18, Appl
29	1686	94.8	2307	3	US-09-263-933-16	Sequence 16, Appl
30	1686	94.8	2307	4	US-09-919-901-16	Sequence 16, Appl
31	1686	94.8	2307	4	US-10-191-966-16	Sequence 16, Appl
32	1649	92.7	2013	1	US-08-324-977-12	Sequence 12, Appl
33	1649	92.7	2013	2	US-08-384-616-12	Sequence 12, Appl
34	1649	92.7	2013	2	US-08-904-686A-12	Sequence 12, Appl
35	1649	92.7	2013	3	US-09-315-850-12	Sequence 12, Appl
36	1649	92.7	2201	3	US-08-952-981A-2	Sequence 2, Appl
37	1649	92.7	2620	1	US-08-324-977-32	Sequence 32, Appl
38	1649	92.7	2620	2	US-08-384-616-32	Sequence 32, Appl
39	1649	92.7	2620	2	US-08-904-686A-32	Sequence 32, Appl
40	1649	92.7	2620	3	US-09-315-850-32	Sequence 32, Appl
41	1649	92.7	2621	1	US-08-324-977-36	Sequence 36, Appl
42	1649	92.7	2621	2	US-08-384-616-36	Sequence 36, Appl
43	1649	92.7	2621	2	US-08-904-686A-36	Sequence 36, Appl
44	1649	92.7	2621	3	US-09-315-850-36	Sequence 36, Appl
45	1649	92.7	3010	1	US-08-324-977-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1
US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamairre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-14

Query Match	100.0%	Score 1778;	DB 4;	Length 341;
Best Local Similarity	100.0%	Pred. No. 5.9e-173;		
Matches 341;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	VRGRDAIILLTCAVHPELI	FDITKLLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV	60
Db	1	VRGRDAIILLTCAVHPELI	FDITKLLLAIFGPIMLVLAQGITKVPYFVRAQGLIRACMLV	60
Qy	61	RKAAGGHYQVMAFMKLAAL	TGTVYDHLTLPQDWAHAGLRDLAVAVEPFI	120
Db	61	RKAAGGHYQVMAFMKLAAL	TGTVYDHLTLPQDWAHAGLRDLAVAVEPFI	120
Qy	121	WGADTAACGDIISGLPV	SARRREILIGPADNFGQGWRLAPITAY	180
Db	121	WGADTAACGDIISGLPV	SARRREILIGPADNFGQGWRLAPITAY	180
Qy	181	SLTGRDNQVEGEVQV	VSTATQSLATCVNGVCWTFVHGAGSKTLAGPKGITOMYTNVD	240
Db	181	SLTGRDNQVEGEVQV	VSTATQSLATCVNGVCWTFVHGAGSKTLAGPKGITOMYTNVD	240
Qy	241	QDLVGMQAPFGARSMT	PCTCGSSDLYLVTRHADYIPVRRRGDSRGSLLSPRPVSYLKSS	300
Db	241	QDLVGMQAPFGARSMT	PCTCGSSDLYLVTRHADYIPVRRRGDSRGSLLSPRPVSYLKSS	300
Qy	301	GGPLLCPSGHAGVIF	RAAVCTRGVAKAVDFIPVESMETTMR	341
Db	301	GGPLLCPSGHAGVIF	RAAVCTRGVAKAVDFIPVESMETTMR	341

```
Db 301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-12

Query Match 100.0%; Score 1778; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 6.9e-173; Indels 0; Gaps 0;
Matches 341; Conservative 0; Mismatches 0;

Qy 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 40 VRGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 99
Qy 61 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPFIQSDMEVKIIT 120
Db 100 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPFIQSDMEVKIIT 159
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGQWRLLAPITAYSQOTRGLGCIIT 180
Db 160 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGQWRLLAPITAYSQOTRGLGCIIT 219
Qy 181 SLTGRDKNOVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITQMYTNVD 240
Db 220 SLTGRDKNOVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITQMYTNVD 279
Qy 241 QDLVGWQAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVRRRGDSRGSLLSPRPVSYLKSS 300
Db 280 QDLVGWQAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVRRRGDSRGSLLSPRPVSYLKSS 339
Qy 301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341
Db 340 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 380

RESULT 4
US-10-017-736C-11
; Sequence 11, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarrre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11

Query Match 100.0%; Score 1778; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 7.3e-173;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 53 VRGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 112
Qy 61 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPFIQSDMEVKIIT 120
Db 113 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPFIQSDMEVKIIT 172
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGQWRLLAPITAYSQOTRGLGCIIT 180

Db 301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-13

Query Match 100.0%; Score 1778; DB 4; Length 352;
Best Local Similarity 100.0%; Pred. No. 6.2e-173;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 12 VRGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 71
Qy 61 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPFIQSDMEVKIIT 120
Db 72 RKAAGHYVQWAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPFIQSDMEVKIIT 131
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGQWRLLAPITAYSQOTRGLGCIIT 180
Db 132 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGQWRLLAPITAYSQOTRGLGCIIT 191
Qy 181 SLTGRDKNOVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITQMYTNVD 240
Db 192 SLTGRDKNOVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPKGPIITQMYTNVD 251
Qy 241 QDLVGWQAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVRRRGDSRGSLLSPRPVSYLKSS 300
Db 252 QDLVGWQAPPGARSMTPTCTCGSSDLYLVTTRHADVIPVRRRGDSRGSLLSPRPVSYLKSS 311
Qy 301 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 341
Db 312 GGPLLCPSGHAVGIFRAAUCTRGVAKAVDFIPVESMETTMR 352

RESULT 3
US-10-017-736C-12
; Sequence 12, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarrre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
```

Db 173 WGADTAACGDIISGLPVSARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 232.
Qy 181 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCVTVFHGAGSKTLAGPKGPITOMYTNVD 240
Db 233 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCVTVFHGAGSKTLAGPKGPITOMYTNVD 292
Qy 241 QDLVGMQAPPAGRSMTPTCTCGSSDLXLYLTHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Db 293 QDLVGMQAPPAGRSMTPTCTCGSSDLXLYLTHADVIPVRRGDSRGSLLSPRPVSYLKSS 352
Qy 301 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 353 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393

RESULT 5
US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match 100.0%; Score 1778; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 7.7e-173;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 57 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 116
Qy 61 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVPFSDMEVKIIT 120
Db 117 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVPFSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVSARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
Db 177 WGADTAACGDIISGLPVSARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCVTVFHGAGSKTLAGPKGPITOMYTNVD 240
Db 237 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCVTVFHGAGSKTLAGPKGPITOMYTNVD 296
Qy 241 QDLVGMQAPPAGRSMTPTCTCGSSDLXLYLTHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPAGRSMTPTCTCGSSDLXLYLTHADVIPVRRGDSRGSLLSPRPVSYLKSS 356

Query Match 100.0%; Score 1778; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 7.7e-173;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 57 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 116
Qy 61 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVPFSDMEVKIIT 120
Db 117 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVPFSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVSARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
Db 177 WGADTAACGDIISGLPVSARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCVTVFHGAGSKTLAGPKGPITOMYTNVD 240
Db 237 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCVTVFHGAGSKTLAGPKGPITOMYTNVD 296
Qy 241 QDLVGMQAPPAGRSMTPTCTCGSSDLXLYLTHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPAGRSMTPTCTCGSSDLXLYLTHADVIPVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 357 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 6
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343

; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match 95.7%; Score 1702; DB 4; Length 2201;
Best Local Similarity 94.1%; Pred. No. 5.3e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 57 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 116
Qy 61 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVPFSDMEVKIIT 120
Db 117 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLDQWAHAGLRDLAVAVEPVPFSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVSARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
Db 177 WGADTAACGDIISGLPVSARRGRIILGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCVTVFHGAGSKTLAGPKGPITOMYTNVD 240
Db 237 SLTGRDNQVEGEVQVYSTATQSLATCVNGVCVTVFHGAGSKTLAGPKGPITOMYTNVD 296
Qy 241 QDLVGMQAPPAGRSMTPTCTCGSSDLXLYLTHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPAGRSMTPTCTCGSSDLXLYLTHADVIPVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 357 GGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 7
US-09-539-601-15
; Sequence 15, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-15

Query Match 95.7%; Score 1702; DB 4; Length 2201;
Best Local Similarity 94.1%; Pred. No. 5.3e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 57 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 116

Query Match 95.7%; Score 1702; DB 4; Length 2201;
Best Local Similarity 94.1%; Pred. No. 5.3e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 57 VRGRDAIILLTCAVHPELIFDIITKLLAIFGPLMVLQAGITKVPYFVRAQGLIRACMLV 116

```
Qy 61 RKAAGHYVQWAFKLAALCTGYVDHLTPLODWAHAGLRDLAVAVPVPFSDMEVKIIT 120
Db 117 RKVAGHYVQWALMKLAALCTGYVDHLTPLRDWAHAGLRDLAVAVPVPFSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVARSARRGRIILGPADNFGQWRLLAPITAYSQOQTRGLLGCIIT 180
Db 177 WGADTAACGDIISGLPVARSARRGRIILGPADNFGQWRLLAPITAYSQOQTRGLLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVNSTATQSFATCVNGVCHTVFHGAGSKTLAGPKGPIITQMYTNVD 240
Db 237 SLTGRDNQVEGEVQVNSTATQSFATCVNGVCHTVFHGAGSKTLAGPKGPIITQMYTNVD 296
Qy 241 QDLVGWQAPPAGRSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGWQAPPAGRSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVSMETTM 341
Db 357 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVSMETTM 397

RESULT 8
US-10-029-907-3
; Sequence 3, Application US/10029907
; Patent No. 6706874
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; FILE REFERENCE: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRP
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3
```

```
Query Match 95.7%; Score 1702; DB 4; Length 2201;
Best Local Similarity 94.1%; Pred. No. 5.3e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIIDITKLLAIFGPLMVLQAGITKVPYFVRAOGLIRACMLV 60
Db 57 VRGRDAVILLTCAIHPELIITIKLLAAILGLPLMVLQAGITKVPYFVRAHGLIRACMLV 116
Qy 61 RKAAGHYVQWAFKLAALCTGYVDHLTPLODWAHAGLRDLAVAVPVPFSDMEVKIIT 120
Db 117 RKVAGHYVQWALMKLAALCTGYVDHLTPLRDWAHAGLRDLAVAVPVPFSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVARSARRGRIILGPADNFGQWRLLAPITAYSQOQTRGLLGCIIT 180
Db 177 WGADTAACGDIISGLPVARSARRGRIILGPADNFGQWRLLAPITAYSQOQTRGLLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVNSTATQSFATCVNGVCHTVFHGAGSKTLAGPKGPIITQMYTNVD 240
Db 237 SLTGRDNQVEGEVQVNSTATQSFATCVNGVCHTVFHGAGSKTLAGPKGPIITQMYTNVD 296
Qy 241 QDLVGWQAPPAGRSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGWQAPPAGRSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
```

```
Qy 301 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVSMETTM 341
Db 357 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVSMETTM 397

RESULT 9
US-09-539-601-3
; Sequence 3, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 3010
; TYPE: PRP
; ORGANISM: Hepatitis C virus
US-09-539-601-3

Query Match 95.7%; Score 1702; DB 4; Length 3010;
Best Local Similarity 94.1%; Pred. No. 8.4e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIIDITKLLAIFGPLMVLQAGITKVPYFVRAOGLIRACMLV 60
Db 866 VRGRDAVILLTCAIHPELIITIKLLAAILGLPLMVLQAGITKVPYFVRAHGLIRACMLV 925
Qy 61 RKAAGHYVQWAFKLAALCTGYVDHLTPLODWAHAGLRDLAVAVPVPFSDMEVKIIT 120
Db 926 RKVAGHYVQWALMKLAALCTGYVDHLTPLRDWAHAGLRDLAVAVPVPFSDMEVKIIT 985
Qy 121 WGADTAACGDIISGLPVARSARRGRIILGPADNFGQWRLLAPITAYSQOQTRGLLGCIIT 180
Db 986 WGADTAACGDIISGLPVARSARRGRIILGPADNFGQWRLLAPITAYSQOQTRGLLGCIIT 1045
Qy 181 SLTGRDNQVEGEVQVNSTATQSFATCVNGVCHTVFHGAGSKTLAGPKGPIITQMYTNVD 240
Db 1046 SLTGRDNQVEGEVQVNSTATQSFATCVNGVCHTVFHGAGSKTLAGPKGPIITQMYTNVD 1105
Qy 241 QDLVGWQAPPAGRSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 1106 QDLVGWQAPPAGRSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 1165
Qy 301 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVSMETTM 341
Db 1166 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVSMETTM 1206

RESULT 10
US-09-539-601-21
; Sequence 21, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 21
; LENGTH: 3010
; TYPE: PRP
; ORGANISM: Hepatitis C virus
US-09-539-601-21
```


Query Match 95.7%; Score 1702; DB 4; Length 3010;
Best Local Similarity 94.1%; Pred. No. 8.4e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

QY 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAOGLIRACMLV 60
DB 866 VRGRDAVILLTCAIHPELIFTITKILLAILGPMVLQAGITKVPYFVRAHGLIRACMLV 925

QY 61 RKAAGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPVFSMEVKIIT 120
DB 926 RKVAGHYVQMAFMKLAALGTYYVDHLTPLRDWAHAGLRDLAVAVPVPVFSMETKVIIT 985

QY 121 WGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQOTRGLGCIIT 180
DB 986 WGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQOTRGLGCIIT 1045

QY 181 SLGRDNQVGEVQVNSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 240
DB 1046 SLGRDNQVGEVQVNSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 1105

QY 241 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
DB 1106 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 1165

QY 301 GGPLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 341
DB 1166 GGPLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 1206

RESULT 11
US-09-539-601-27
; Sequence 27, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 27
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-27

Query Match 95.7%; Score 1702; DB 4; Length 3010;
Best Local Similarity 94.1%; Pred. No. 8.4e-164;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

QY 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAOGLIRACMLV 60
DB 866 VRGRDAVILLTCAIHPELIFTITKILLAILGPMVLQAGITKVPYFVRAHGLIRACMLV 925

QY 61 RKAAGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPVFSMEVKIIT 120
DB 926 RKVAGHYVQMAFMKLAALGTYYVDHLTPLRDWAHAGLRDLAVAVPVPVFSMETKVIIT 985

QY 121 WGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQOTRGLGCIIT 180
DB 986 WGADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQOTRGLGCIIT 1045

QY 181 SLGRDNQVGEVQVNSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 240
DB 1046 SLGRDNQVGEVQVNSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 1105

QY 241 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
DB 1106 QDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 1165

QY 301 GGPLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 341
DB 1166 GGPLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 1206

RESULT 12
US-09-263-933-4
; Sequence 4, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
US-09-263-933-4

Query Match 95.5%; Score 1698; DB 3; Length 1692;
Best Local Similarity 94.1%; Pred. No. 9.2e-164;
Matches 320; Conservative 12; Mismatches 8; Indels 0; Gaps 0;

QY 2 RGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAOGLIRACMLV 61
DB 146 RGRDAIILLTCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAOGLIRACMLV 205

QY 62 KAAGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPVFSMEVKIIT 121
DB 206 KVAGHYVQMAFMKLAALGTYYVDHLTPLRDWAHAGLRDLAVAVPVPVFSMETKVIIT 265

QY 122 GADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQOTRGLGCIIT 181
DB 266 GADTAACGDIISGLPVSARRGRIILGPADNFEQGWRLAPITAYSQOTRGLGCIIT 325

QY 182 LTGRDNQVGEVQVNSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 241
DB 326 LTGRDNQVGEVQVNSTATQSFATCVNGVCHVTVPFHGAGSKTLAGPKGPITQMYTNVD 385

QY 242 DLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 301
DB 386 DLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 445

QY 302 GGPLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 341
DB 446 GGPLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVSMETTM 485

RESULT 13
US-09-919-901-4
; Sequence 4, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08

```
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRN
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-09-919-901-4

Query Match
Best Local Similarity 95.5%; Score 1698; DB 4; Length 1692;
Matches 320; Conservative 12; Mismatches 8; Indels 0; Gaps 0;

Qy 2 RGRDAIILLCAVHPELIIDITKLLAIFGLPLMVLAQGITKVPYFVRAOGLIHACMLVR 61
Db 146 RGRDAIILLCAVHPELIIDITKLLAIFGLPLMVLAQGITKVPYFVRAOGLIHACMLVR 205
Qy 62 KAAGGHVQVMAFMKLAALTGTVYVDHLTPLODWAHAGRLDLAVAVEPVIISDMVEKLIITW 121
Db 206 KVAAGGHVQVMAFMKLGALGTGYIYNHLTPLRDWAHAGRLDLAVAVEPVIISDMETKIITW 265
Qy 122 GADTAACGDIISGLPVSARRGELLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITS 181
Db 266 GADTAACGDIISGLPVSARRGELLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITS 325
Qy 182 LTGRDKNQVEGEVQVWSTATQSFATCNGVGVCTVTFHGAGSKTLAGPKGPIITQMTYTNVDQ 241
Db 326 LTGRDKNQVEGEVQVWSTATQSFATCNGVGVCTVTFHGAGSKTLAGPKGPIITQMTYTNVDQ 385
Qy 242 DLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSG 301
Db 386 DLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSG 445
Qy 302 GPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 446 GPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 15
US-09-263-933-2
; Sequence 2, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/263,933
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; EARLIER FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 2307
; TYPE: PRN
; ORGANISM: Artificial Sequence
US-09-263-933-2

Query Match 95.5%; Score 1698; DB 3; Length 2307;
Best Local Similarity 94.1%; Pred. No. 1.5e-163;
Matches 320; Conservative 12; Mismatches 8; Indels 0; Gaps 0;

Qy 2 RGRDAIILLCAVHPELIIDITKLLAIFGLPLMVLAQGITKVPYFVRAOGLIHACMLVR 61
Db 238 RGRDAIILLCAVHPELIIDITKLLAIFGLPLMVLAQGITKVPYFVRAOGLIHACMLVR 297
Qy 62 KAAGGHVQVMAFMKLAALTGTVYVDHLTPLODWAHAGRLDLAVAVEPVIISDMVEKLIITW 121
Db 298 KVAAGGHVQVMAFMKLGALGTGYIYNHLTPLRDWAHAGRLDLAVAVEPVIISDMETKIITW 357
Qy 122 GADTAACGDIISGLPVSARRGELLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITS 181
Db 358 GADTAACGDIISGLPVSARRGELLGPADNFEQGWRLAPITAYSQOTRGLLGCIIITS 417
Qy 182 LTGRDKNQVEGEVQVWSTATQSFATCNGVGVCTVTFHGAGSKTLAGPKGPIITQMTYTNVDQ 241
Db 418 LTGRDKNQVEGEVQVWSTATQSFATCNGVGVCTVTFHGAGSKTLAGPKGPIITQMTYTNVDQ 477
Qy 242 DLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSG 301
Db 478 DLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSG 537
Qy 302 GPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 446 GPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 485

US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRN
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-191-966-4

Query Match 95.5%; Score 1698; DB 4; Length 1692;
Best Local Similarity 94.1%; Pred. No. 9.2e-164;
Matches 320; Conservative 12; Mismatches 8; Indels 0; Gaps 0;

Qy 2 RGRDAIILLCAVHPELIIDITKLLAIFGLPLMVLAQGITKVPYFVRAOGLIHACMLVR 61
```

Db 538 GPLLCPSGHAVGIFRAAVCTRGVAKAVDFVPVSEMETMR 577

Search completed: May 26, 2005, 22:03:43
Job time : 20.7908 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 59.3724 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-14
Perfect score: 1778
Sequence: 1 VRGGRDAIILLTCAVHPELI.....RGVAKAVDFIPVSMETMR 341

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries.

Database : Published Applications AA:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1778	100.0	341	13	US-10-017-736-14
2	1778	100.0	341	15	US-10-650-585-14
3	1778	100.0	352	13	US-10-017-736-13
4	1778	100.0	352	15	US-10-650-585-13
5	1778	100.0	380	13	US-10-017-736-12
6	1778	100.0	380	15	US-10-650-585-12
7	1778	100.0	393	13	US-10-017-736-11
8	1778	100.0	393	15	US-10-650-585-11
9	1778	100.0	409	13	US-10-017-736-2
10	1778	100.0	409	15	US-10-650-585-2
11	1702	95.7	2201	13	US-10-029-907-3
12	1702	95.7	2201	14	US-10-309-561-3
13	1702	95.7	2201	16	US-10-789-355-3
14	1778	100.0	341	13	US-10-017-736-14
15	1778	100.0	341	15	US-10-650-585-14
16	1778	100.0	352	13	US-10-017-736-13
17	1778	100.0	352	15	US-10-650-585-13
18	1778	100.0	380	13	US-10-017-736-12
19	1778	100.0	380	15	US-10-650-585-12
20	1778	100.0	393	13	US-10-017-736-11
21	1778	100.0	393	15	US-10-650-585-11
22	1778	100.0	409	13	US-10-017-736-2
23	1778	100.0	409	15	US-10-650-585-2
24	1702	95.7	2201	13	US-10-029-907-3
25	1702	95.7	2201	14	US-10-309-561-3
26	1702	95.7	2201	16	US-10-789-355-3

14	1702	95.7	3010	15	US-10-467-000-1	Sequence 1, Appli
15	1698	95.5	1692	10	US-09-919-901-4	Sequence 4, Appli
16	1698	95.5	1692	14	US-10-191-966-4	Sequence 4, Appli
17	1698	95.5	2307	10	US-09-919-901-2	Sequence 2, Appli
18	1698	95.5	2307	14	US-10-191-966-2	Sequence 2, Appli
19	1697	95.4	3010	16	US-10-333-449A-34	Sequence 34, Appli
20	1695	95.3	1692	10	US-09-919-901-11	Sequence 11, Appli
21	1695	95.3	1692	14	US-10-191-966-11	Sequence 11, Appli
22	1695	95.3	2307	10	US-09-919-901-9	Sequence 9, Appli
23	1695	95.3	2307	14	US-10-191-966-9	Sequence 9, Appli
24	1686	94.8	1692	10	US-09-919-901-18	Sequence 18, Appli
25	1686	94.8	1692	14	US-10-191-966-18	Sequence 18, Appli
26	1686	94.8	2307	10	US-09-919-901-16	Sequence 16, Appli
27	1686	94.8	2307	14	US-10-191-966-16	Sequence 16, Appli
28	1649	92.7	2201	13	US-10-085-476-2	Sequence 2, Appli
29	1589	89.4	303	13	US-10-017-736-10	Sequence 10, Appli
30	1589	89.4	303	15	US-10-650-585-10	Sequence 10, Appli
31	1589	89.4	334	13	US-10-017-736-4	Sequence 4, Appli
32	1589	89.4	334	15	US-10-650-585-4	Sequence 4, Appli
33	1580	88.9	303	13	US-10-017-736-18	Sequence 18, Appli
34	1580	88.9	303	15	US-10-650-585-18	Sequence 18, Appli
35	1579	88.8	303	13	US-10-017-736-16	Sequence 16, Appli
36	1579	88.8	303	15	US-10-650-585-16	Sequence 16, Appli
37	1570	88.3	301	13	US-10-017-736-17	Sequence 17, Appli
38	1570	88.3	301	15	US-10-650-585-17	Sequence 17, Appli
39	1569	88.2	3011	9	US-09-742-659-4	Sequence 4, Appli
40	1569	88.2	3011	10	US-09-891-894-3	Sequence 3, Appli
41	1569	88.2	3011	14	US-10-184-150-3	Sequence 3, Appli
42	1569	88.2	3011	15	US-10-328-997-3	Sequence 3, Appli
43	1569	88.2	3012	9	US-09-338-076-2	Sequence 2, Appli
44	1569	88.2	3012	10	US-09-995-937-2	Sequence 2, Appli
45	1569	88.2	3012	10	US-09-917-563-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1
US-10-017-736-14
; Sequence 14, Application US/10017736
; Publication No. US20020192640A1.
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-14

Query Match	100.0%	Score 1778;	DB 13;	Length 341;
Best Local Similarity	100.0%	Pred. No. 6.8e-169;		
Matches 341;	Conservative	0;	Mismatches	0;
Indels	0;	Gaps	0;	
Qy	1	VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV	60	
Db	1	VRGGRDAIILLTCAVHPELIFDITKLLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV	60	
Qy	61	RKAAGGHYVQMAFKLAALTGTYYVYDHLTFLQDWAHAGLRDLAVAFVPSFSDNEVKIIT	120	
Db	61	RKAAGGHYVQMAFKLAALTGTYYVYDHLTFLQDWAHAGLRDLAVAFVPSFSDNEVKIIT	120	
Qy	121	WGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLPITATYSQOTRGLGCIIT	180	
Db	121	WGADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLLPITATYSQOTRGLGCIIT	180	

```
Qy 181 SLTGRDKNQVEGEVQVWVSTATQSFATCVCNGVCTVTFHGAGSKTLGPKGPIQMYTNVD 240
Db 181 SLTGRDKNQVEGEVQVWVSTATQSFATCVCNGVCTVTFHGAGSKTLGPKGPIQMYTNVD 240
Qy 241 QDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGSS 300
Db 241 QDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGSS 300
Qy 301 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 341
Db 301 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 341
```

RESULT 2

```
US-10-650-585-14
; Sequence 14, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRP
; ORGANISM: HCV
US-10-650-585-14
```

```
Query Match 100.0%; Score 1778; DB 15; Length 341;
Best Local Similarity 100.0%; Pred. No. 6.8e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 VRGGRDAIILITCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 1 VRGGRDAIILITCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 60
Qy 61 RKAAGGHYVQWAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPFSDMEVKIIT 120
Db 61 RKAAGGHYVQWAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPFSDMEVKIIT 120
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 180
Db 121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 180
Qy 181 SLTGRDKNQVEGEVQVWVSTATQSFATCVCNGVCTVTFHGAGSKTLGPKGPIQMYTNVD 240
Db 181 SLTGRDKNQVEGEVQVWVSTATQSFATCVCNGVCTVTFHGAGSKTLGPKGPIQMYTNVD 240
Qy 241 QDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGSS 300
Db 241 QDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGSS 300
Qy 301 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 341
Db 301 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 341
```

RESULT 3

```
US-10-017-736-13
; Sequence 13, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
```

```
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRP
; ORGANISM: HCV
US-10-017-736-13
```

```
Query Match 100.0%; Score 1778; DB 13; Length 352;
Best Local Similarity 100.0%; Pred. No. 7.1e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 VRGGRDAIILITCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 12 VRGGRDAIILITCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 71
Qy 61 RKAAGGHYVQWAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPFSDMEVKIIT 120
Db 72 RKAAGGHYVQWAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPFSDMEVKIIT 131
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 180
Db 132 WGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQOTRGLGCIIT 191
Qy 181 SLTGRDKNQVEGEVQVWVSTATQSFATCVCNGVCTVTFHGAGSKTLGPKGPIQMYTNVD 240
Db 192 SLTGRDKNQVEGEVQVWVSTATQSFATCVCNGVCTVTFHGAGSKTLGPKGPIQMYTNVD 251
Qy 241 QDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGSS 300
Db 252 QDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLSPRPVSYLKGSS 311
Qy 301 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 341
Db 312 GGPLLCPGSHAVGIFRAAUCTRGVAKAVDFIPVSMETTM 352
```

RESULT 4

```
US-10-650-585-13
; Sequence 13, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRP
; ORGANISM: HCV
US-10-650-585-13
```

```
Query Match 100.0%; Score 1778; DB 15; Length 352;
Best Local Similarity 100.0%; Pred. No. 7.1e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 VRGGRDAIILITCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 60
Db 12 VRGGRDAIILITCAVHPELIFDITKLLAIFGPMVLQAGITKVPYFVRAQGLIRACMLV 71
Qy 61 RKAAGGHYVQWAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPFSDMEVKIIT 120
Db 72 RKAAGGHYVQWAFMKLAALGTYYVDHLTPLODWAHAGLRDLAVAVPVPFSDMEVKIIT 131
```

```

QY 121 WGADTAACGDIISGLPVSARRGRIILLGPADNPEGQWRLAPITAYSQOTRGLGCIIT 180
DB 132 WGADTAACGDIISGLPVSARRGRIILLGPADNPEGQWRLAPITAYSQOTRGLGCIIT 191
QY 181 SLTGRDNQVEGEVQVVSSTATQSLATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 240
DB 192 SLTGRDNQVEGEVQVVSSTATQSLATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 251
QY 241 QDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLSPRPVSYLKGS 300
DB 252 QDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLSPRPVSYLKGS 311
QY 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 312 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352

```

RESULT 5

```

US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

```

```

Query Match 100.0%; Score 1778; DB 13; Length 380;
Best Local Similarity 100.0%; Pred. No. 7.9e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 VRGGRDAIILLTCAVHPELIFDITKLLAIFGPLMVLOAGITKVPYFVRAQGLIRACMLV 60
DB 40 VRGGRDAIILLTCAVHPELIFDITKLLAIFGPLMVLOAGITKVPYFVRAQGLIRACMLV 99
QY 61 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLOQMAHAGRLDLAVAPVIFSDMEVKIIT 120
DB 100 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLOQMAHAGRLDLAVAPVIFSDMEVKIIT 159
QY 121 WGADTAACGDIISGLPVSARRGRIILLGPADNPEGQWRLAPITAYSQOTRGLGCIIT 180
DB 160 WGADTAACGDIISGLPVSARRGRIILLGPADNPEGQWRLAPITAYSQOTRGLGCIIT 219
QY 181 SLTGRDNQVEGEVQVVSSTATQSLATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 240
DB 220 SLTGRDNQVEGEVQVVSSTATQSLATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 279
QY 241 QDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLSPRPVSYLKGS 300
DB 280 QDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLSPRPVSYLKGS 339
QY 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 340 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

```

RESULT 6

```

US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.

```

```

; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

```

```

Query Match 100.0%; Score 1778; DB 15; Length 380;
Best Local Similarity 100.0%; Pred. No. 7.9e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 VRGGRDAIILLTCAVHPELIFDITKLLAIFGPLMVLOAGITKVPYFVRAQGLIRACMLV 60
DB 40 VRGGRDAIILLTCAVHPELIFDITKLLAIFGPLMVLOAGITKVPYFVRAQGLIRACMLV 99
QY 61 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLOQMAHAGRLDLAVAPVIFSDMEVKIIT 120
DB 100 RKAAGHYVQMAFMKLAALTGTYYVDHLTPLOQMAHAGRLDLAVAPVIFSDMEVKIIT 159
QY 121 WGADTAACGDIISGLPVSARRGRIILLGPADNPEGQWRLAPITAYSQOTRGLGCIIT 180
DB 160 WGADTAACGDIISGLPVSARRGRIILLGPADNPEGQWRLAPITAYSQOTRGLGCIIT 219
QY 181 SLTGRDNQVEGEVQVVSSTATQSLATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 240
DB 220 SLTGRDNQVEGEVQVVSSTATQSLATCVNGVCWTFVHGAGSKTLAPKGPITQMTYNDV 279
QY 241 QDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLSPRPVSYLKGS 300
DB 280 QDLVGHQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLSPRPVSYLKGS 339
QY 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 340 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

```

RESULT 7

```

US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

```

```

Query Match 100.0%; Score 1778; DB 13; Length 393;
Best Local Similarity 100.0%; Pred. No. 8.3e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 VRGGRDAIILLTCAVHPELIFDITKLLAIFGPLMVLOAGITKVPYFVRAQGLIRACMLV 60
DB 53 VRGGRDAIILLTCAVHPELIFDITKLLAIFGPLMVLOAGITKVPYFVRAQGLIRACMLV 112

```

QY 61 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODMAHAGRLDLAVAVEPVIFSDMEVKIIT 120
DB 113 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODMAHAGRLDLAVAVEPVIFSDMEVKIIT 172
QY 121 WGAADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLAPITAYSQOTRGLGCIIT 180
DB 173 WGAADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLAPITAYSQOTRGLGCIIT 232
QY 181 SLTGRDNQVEGEVQVSTATQSFLLATCVNGVCWTFVHGAGSKTLAGPKGPITQMTYNDV 240
DB 233 SLTGRDNQVEGEVQVSTATQSFLLATCVNGVCWTFVHGAGSKTLAGPKGPITQMTYNDV 292
QY 241 QDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 300
DB 293 QDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 352
QY 301 GGPILLCPSGHANGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 353 GGPILLCPSGHANGVIFRAAVCTRGVAKAVDFIPVESMETTMR 393
RESULT 8
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11

Query Match 100.0%; Score 1778; DB 15; Length 393;
Best Local Similarity 100.0%; Pred. No. 8.3e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 VRGGRDAIILLTCAVHPELIFDITKLLAIFGFLMWLQAGITKVPYFVRAQGLIRACMLV 60
DB 53 VRGGRDAIILLTCAVHPELIFDITKLLAIFGFLMWLQAGITKVPYFVRAQGLIRACMLV 112
QY 61 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODMAHAGRLDLAVAVEPVIFSDMEVKIIT 120
DB 113 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODMAHAGRLDLAVAVEPVIFSDMEVKIIT 172
QY 121 WGAADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLAPITAYSQOTRGLGCIIT 180
DB 173 WGAADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLAPITAYSQOTRGLGCIIT 232
QY 181 SLTGRDNQVEGEVQVSTATQSFLLATCVNGVCWTFVHGAGSKTLAGPKGPITQMTYNDV 240
DB 233 SLTGRDNQVEGEVQVSTATQSFLLATCVNGVCWTFVHGAGSKTLAGPKGPITQMTYNDV 292
QY 241 QDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 300
DB 293 QDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 352
QY 301 GGPILLCPSGHANGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 353 GGPILLCPSGHANGVIFRAAVCTRGVAKAVDFIPVESMETTMR 393
RESULT 9

US-10-017-736-2
; Sequence 2, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-2

Query Match 100.0%; Score 1778; DB 13; Length 409;
Best Local Similarity 100.0%; Pred. No. 8.8e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 VRGGRDAIILLTCAVHPELIFDITKLLAIFGFLMWLQAGITKVPYFVRAQGLIRACMLV 60
DB 57 VRGGRDAIILLTCAVHPELIFDITKLLAIFGFLMWLQAGITKVPYFVRAQGLIRACMLV 116
QY 61 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODMAHAGRLDLAVAVEPVIFSDMEVKIIT 120
DB 117 RKAAGGHYVQMAFMKLAALTGTYYDHLTPLODMAHAGRLDLAVAVEPVIFSDMEVKIIT 176
QY 121 WGAADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLAPITAYSQOTRGLGCIIT 180
DB 177 WGAADTAACGDIISGLPVSAARRGREILLGPADNFEQGWRLAPITAYSQOTRGLGCIIT 236
QY 181 SLTGRDNQVEGEVQVSTATQSFLLATCVNGVCWTFVHGAGSKTLAGPKGPITQMTYNDV 240
DB 237 SLTGRDNQVEGEVQVSTATQSFLLATCVNGVCWTFVHGAGSKTLAGPKGPITQMTYNDV 296
QY 241 QDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 300
DB 297 QDLVGMQAPPGARSMTPTCTCGSSDLVLTTRHADVIPIVRRGDSRGSLLSPRPVSYLKGS 356
QY 301 GGPILLCPSGHANGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
DB 357 GGPILLCPSGHANGVIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 10
US-10-650-585-2
; Sequence 2, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; PRIOR FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-2

Query Match 100.0%; Score 1778; DB 15; Length 409;
Best Local Similarity 100.0%; Pred. No. 8.8e-169;
Matches 341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 60
Db 57 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 116
Qy 61 RKAAGGHVQWAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIIT 120
Db 117 RKAAGGHVQWAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
Db 177 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVWSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIITQMYTNVD 240
Db 237 SLTGRDNQVEGEVQVWSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIITQMYTNVD 296
Qy 241 QDLVGMQAPPGARSMPTCTCGSSDLYLVTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPGARSMPTCTCGSSDLYLVTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 357 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 11

US-10-029-907-3
; Sequence 3, Application US/10029907
; Publication No. US20020142350A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/029,907
; CURRENT FILING DATE: 2001-12-21
; PRIOR FILING DATE: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PR1
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-029-907-3

Query Match 95.7%; Score 1702; DB 13; Length 2201;
Best Local Similarity 94.1%; Pred. No. 3.5e-160;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;
Qy 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 60
Db 57 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 116
Qy 61 RKAAGGHVQWAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIIT 120
Db 117 RKAAGGHVQWAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
Db 177 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVWSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIITQMYTNVD 240
Db 237 SLTGRDNQVEGEVQVWSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIITQMYTNVD 296
Qy 241 QDLVGMQAPPGARSMPTCTCGSSDLYLVTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPGARSMPTCTCGSSDLYLVTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 357 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 13

US-10-789-355-3
; Sequence 3, Application US/10789355

Qy 241 QDLVGMQAPPGARSMPTCTCGSSDLYLVTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPGARSMPTCTCGSSDLYLVTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 357 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 12

US-10-309-561-3
; Sequence 3, Application US/10309561
; Publication No. US20030148348A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/309,561
; CURRENT FILING DATE: 2002-12-04
; PRIOR FILING DATE: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR FILING DATE: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PR1
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
US-10-309-561-3

Query Match 95.7%; Score 1702; DB 14; Length 2201;
Best Local Similarity 94.1%; Pred. No. 3.5e-160;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;
Qy 1 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 60
Db 57 VRGRDAIILLTCAVHPELIFDITKLLAIFGPLMWLOAGITKVPYFVRAOGLIRACMLV 116
Qy 61 RKAAGGHVQWAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIIT 120
Db 117 RKAAGGHVQWAFMKLAALGTGYVDHLTPLODWAHAGLRDLAVAVEPVSFSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 180
Db 177 WGADTAACGDIISGLPVSARRGREILLGPADNFGQGWRLAPITAYSQOTRGLGCIIT 236
Qy 181 SLTGRDNQVEGEVQVWSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIITQMYTNVD 240
Db 237 SLTGRDNQVEGEVQVWSTATQSFATCVCNGVCTVFGAGSKTLAGPKGPIITQMYTNVD 296
Qy 241 QDLVGMQAPPGARSMPTCTCGSSDLYLVTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGMQAPPGARSMPTCTCGSSDLYLVTTRHADVIPIVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 357 GGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 397

```
; Publication No. US20040180333A1
; GENERAL INFORMATION:
; APPLICANT: BOEHRINGER INGELHEIM (CANADA) LTD.
; TITLE OF INVENTION: SELF REPLICATING RNA MOLECULE FROM
; TITLE OF INVENTION: HEPATITIS C VIRUS
; FILE REFERENCE: 13/083
; CURRENT APPLICATION NUMBER: US/10/789,355
; CURRENT FILING DATE: 2004-02-27
; PRIOR APPLICATION NUMBER: US/10/029,907
; PRIOR FILING DATE: 2001-12-21
; PRIOR APPLICATION NUMBER: 60/257,857
; PRIOR FILING DATE: 2000-12-22
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 2201
; TYPE: PRT
; ORGANISM: HCV
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 882
; OTHER INFORMATION: Xaa is Lys or Arg
; FEATURE:
; NAME/KEY: VARIANT
; LOCATION: 1489
; OTHER INFORMATION: Xaa is Leu
; US-10-789-355-3

Query Match          95.7%; Score 1702; DB 16; Length 2201;
Best Local Similarity 94.1%; Pred. No. 3.5e-160;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGGRDAIILLTCAVHPELIFDIITKLLAIIPGLMVLQAGITKVPYFVRAHGLIRACMLV 60
Db 57 VRGGRDAVILLTCAIHPELIFTITKLLAILGLPLMVLQAGITKVPYFVRAHGLIRACMLV 116
Qy 61 RKAAGGHVQMAFMKLAALTCTVYVDHLLTPLDQWAHAGLRDLAVAVPFIQSDMEVKIIT 120
Db 117 RKVAGGHVQVQALMKLAALTCTVYVDHLLTPLDQWAHAGLRDLAVAVPFIQSDMEVKIIT 176
Qy 121 WGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLAPITAYSQQTRGLGCIIT 180
Db 177 WGADTAACGDIILGLPVSARRGREIILGPADNFEQGWRLAPITAYSQQTRGLGCIIT 236
Qy 181 SLTGRDNQVGEVQVQVSTATQSFATCVNGVCTVYHAGSKTLGKPGITOMYTNVD 240
Db 237 SLTGRDNQVGEVQVQVSTATQSFATCVNGVCTVYHAGSKTLGKPGITOMYTNVD 296
Qy 241 QDLVGWQAPPGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Db 297 QDLVGWQAPPGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 356
Qy 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 357 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

RESULT 14
US-10-467-000-1
; Sequence 1, Application US/10467000
; Publication No. US20040067486A1
; GENERAL INFORMATION:
; APPLICANT: De Francesco, Raffaele
; APPLICANT: Migliaccio, Giovanni
; APPLICANT: Paonessa, Giacomo
; TITLE OF INVENTION: HEPATITIS C VIRUS REPLICONS AND REPLICON
; TITLE OF INVENTION: ENHANCED CELLS
; FILE REFERENCE: ITR0003P
; CURRENT APPLICATION NUMBER: US/10/467,000
; CURRENT FILING DATE: 2003-07-21
; PRIOR APPLICATION NUMBER: PCT/EP02/00526
; PRIOR FILING DATE: 2002-01-16
; PRIOR APPLICATION NUMBER: 60/263,479

; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3010
; TYPE: PRT
; ORGANISM: Con 1 HCV isolate nucleic acid
; US-10-467-000-1

Query Match          95.7%; Score 1702; DB 15; Length 3010;
Best Local Similarity 94.1%; Pred. No. 5.4e-160;
Matches 321; Conservative 11; Mismatches 9; Indels 0; Gaps 0;

Qy 1 VRGGRDAIILLTCAVHPELIFDIITKLLAIIPGLMVLQAGITKVPYFVRAOGLIRACMLV 60
Db 866 VRGGRDAVILLTCAIHPELIFTITKLLAILGLPLMVLQAGITKVPYFVRAHGLIRACMLV 925
Qy 61 RKAAGGHVQMAFMKLAALTCTVYVDHLLTPLDQWAHAGLRDLAVAVPFIQSDMEVKIIT 120
Db 926 RKVAGGHVQVQALMKLAALTCTVYVDHLLTPLDQWAHAGLRDLAVAVPFIQSDMEVKIIT 985
Qy 121 WGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLAPITAYSQQTRGLGCIIT 180
Db 986 WGADTAACGDIILGLPVSARRGREIILGPADNFEQGWRLAPITAYSQQTRGLGCIIT 1045
Qy 181 SLTGRDNQVGEVQVQVSTATQSFATCVNGVCTVYHAGSKTLGKPGITOMYTNVD 240
Db 1046 SLTGRDNQVGEVQVQVSTATQSFATCVNGVCTVYHAGSKTLGKPGITOMYTNVD 1105
Qy 241 QDLVGWQAPPGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 300
Db 1106 QDLVGWQAPPGARSMTPTCTGSSDLYLVTRHADVIPVRRGDSRGSLLSPRPVSYLKSS 1165
Qy 301 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
Db 1166 GGPLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 1206

RESULT 15
US-09-919-901-4
; Sequence 4, Application US/09919901
; Publication No. US20030082518A1
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
; US-09-919-901-4

Query Match          95.5%; Score 1698; DB 10; Length 1692;
Best Local Similarity 94.1%; Pred. No. 6.1e-160;
Matches 320; Conservative 12; Mismatches 8; Indels 0; Gaps 0;

Qy 2 RGGSDAIILLTCAVHPELIFDIITKLLAIIPGLMVLQAGITKVPYFVRAOGLIRACMLV 61
Db 146 RGGSDAIILLTCAVHPELIFDIITKLLAILGLPLMVLQAGITRVPYFVRAOGLIRACMLV 205
```

Qy	62	KAAGHYVQMAFMKLAALTGTYVVDHLTPLODWAHAGLRDLAVAVEPVIFSDMEVKIITW	121
Db	206	KVAGGHYVQMAFMKLGALTGTYYIYNHLTPLRDWAHAGLRDLAVAVEPVVFSMETKIITW	265
Qy	122	GADTAACGDIIISGLPVSARRGREILLGEADNFEQGWELLAPITAYSQOTRGLLGCIIITS	181
Db	266	GADTAACGDIIILGLPVSARRKEILLGPADSLEGRGWRLLAPITAYSQOTRGLLGCIIITS	325
Qy	182	LTGRDKNOVEGEVQVSTATQSFLATCVNGVCWTVFHGAGSKTLAGPKGPITOMYTNVDQ	241
Db	326	LTGRDKNOVEGEVQVSTATQSFLATCVNGVCWTVYHGAGSKTLAGPKGPITOMYTNVDQ	385
Qy	242	DLVGWQAPPGARSMTPTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSG	301
Db	386	DLVGWQAPPGARSMTPTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPVSYLKSSG	445
Qy	302	GPLLCPSGHAVGI FRAAVCTRGAKAVDFIPVESMETTMR	341
Db	446	GPLLCPSGHAVGI FRAAVCTRGAKAVDFIPVESMETTMR	485

Search completed: May 26, 2005, 22:43:02
Job time : 60.5153 secs

This Page Blank (uspto)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:44:29 ; Search time 16.947 Seconds
(without alignments)
1286.219 Million cell updates/sec

Title: US-10-650-585-15
Perfect score: 1532
Sequence: 1 AQLIRACMLVRKAAGHYV.....RGVAKAVDFIPVESMETTMR 292

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PTTUS COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1532	100.0	292	4	US-10-017-736C-15
2	1532	100.0	303	4	US-10-017-736C-10
3	1532	100.0	334	4	US-10-017-736C-4
4	1532	100.0	341	4	US-10-017-736C-14
5	1532	100.0	352	4	US-10-017-736C-13
6	1532	100.0	380	4	US-10-017-736C-12
7	1532	100.0	393	4	US-10-017-736C-11
8	1532	100.0	409	4	US-10-017-736C-2
9	1523	99.3	303	4	US-10-017-736C-18
10	1522	99.3	303	4	US-10-017-736C-16
11	1513	98.8	301	4	US-10-017-736C-17
12	1473	96.1	1692	3	US-09-263-933-4
13	1473	96.1	1692	4	US-09-919-901-4
14	1473	96.1	1692	4	US-10-191-966-4
15	1473	96.1	2201	4	US-09-539-601-6
16	1473	96.1	2201	4	US-09-539-601-15
17	1473	96.1	2201	4	US-10-029-907-3
18	1473	96.1	2307	3	US-09-263-933-2
19	1473	96.1	2307	4	US-09-919-901-2
20	1473	96.1	2307	4	US-10-191-966-2
21	1473	96.1	3010	4	US-09-539-601-3
22	1473	96.1	3010	4	US-09-539-601-21
23	1473	96.1	3010	4	US-09-539-601-27
24	1470	96.0	1692	3	US-09-263-933-11
25	1470	96.0	1692	4	US-09-919-901-11
26	1470	96.0	1692	4	US-10-191-966-11
27	1470	96.0	2307	3	US-09-263-933-9

28	1470	96.0	2307	4	US-09-919-901-9	Sequence 9, Appli
29	1470	96.0	2307	4	US-10-191-966-9	Sequence 9, Appli
30	1466	95.7	3010	4	US-09-539-601-33	Sequence 33, Appl
31	1461	95.4	1692	3	US-09-263-933-18	Sequence 18, Appl
32	1461	95.4	1692	4	US-09-919-901-18	Sequence 18, Appl
33	1461	95.4	1692	4	US-10-191-966-18	Sequence 18, Appl
34	1461	95.4	2307	3	US-09-263-933-16	Sequence 16, Appl
35	1461	95.4	2307	4	US-09-919-901-16	Sequence 16, Appl
36	1461	95.4	2307	4	US-10-191-966-16	Sequence 16, Appl
37	1450	94.6	3010	3	US-09-014-416-3	Sequence 3, Appli
38	1424	93.0	2013	1	US-08-324-977-12	Sequence 12, Appl
39	1424	93.0	2013	2	US-08-384-616-12	Sequence 12, Appl
40	1424	93.0	2013	2	US-08-904-686A-12	Sequence 12, Appl
41	1424	93.0	2013	3	US-09-315-850-12	Sequence 12, Appl
42	1424	93.0	2201	3	US-08-952-981A-2	Sequence 2, Appli
43	1424	93.0	2620	1	US-08-324-977-32	Sequence 32, Appl
44	1424	93.0	2620	2	US-08-384-616-32	Sequence 32, Appl
45	1424	93.0	2620	2	US-08-904-686A-32	Sequence 32, Appl

ALIGNMENTS

RESULT 1
US-10-017-736C-15
; Sequence 15, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamirre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 292
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-15

Query Match	100.0%;	Score 1532;	DB 4;	Length 292;
Best Local Similarity	100.0%;	Pred. NO. 1.1e-145;		
Matches 292;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	AQGLIRACMLVRKAAGHYVQMAFMKLAALGTGVYDHLTPLODWAHAGLRDLAVAVEPV	60	
Db	1	AQGLIRACMLVRKAAGHYVQMAFMKLAALGTGVYDHLTPLODWAHAGLRDLAVAVEPV	60	
Qy	61	IFSDMEVKIITWGDATTAACGDIISGLPVSARRGREILLGPADNPFEGQGWRLAPITAYSQ	120	
Db	61	IFSDMEVKIITWGDATTAACGDIISGLPVSARRGREILLGPADNPFEGQGWRLAPITAYSQ	120	
Qy	121	QTRGLGCIITSLTGRDKNOVEGEVQVVSSTATQSLATCVNGVCWTVFHGAGSKTLAGPK	180	
Db	121	QTRGLGCIITSLTGRDKNOVEGEVQVVSSTATQSLATCVNGVCWTVFHGAGSKTLAGPK	180	
Qy	181	GPITQMTVNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS	240	
Db	181	GPITQMTVNDQDLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS	240	
Qy	241	PRPVSYLKGSGGFLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	292	
Db	241	PRPVSYLKGSGGFLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR	292	

RESULT 2

```
US-10-017-736C-10
; Sequence 10, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-10

Query Match      100.0%; Score 1532; DB 4; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.1e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 60
Db 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 71
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 131
Qy 121 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 180
Db 132 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 191
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 240
Db 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 251
Qy 241 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 252 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303

RESULT 3
US-10-017-736C-4
; Sequence 4, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-4

Query Match      100.0%; Score 1532; DB 4; Length 334;
Best Local Similarity 100.0%; Pred. No. 1.1e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 60
Db 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 71
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 131
Qy 121 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 180
Db 132 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 191
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 240
Db 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 251
Qy 241 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 252 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303

US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-14

Query Match      100.0%; Score 1532; DB 4; Length 341;
Best Local Similarity 100.0%; Pred. No. 1.3e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 60
Db 50 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 109
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 110 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 169
Qy 121 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 180
Db 170 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 229
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 240
Db 230 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 289
Qy 241 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 290 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
```

```
US-10-017-736C-10
; Sequence 10, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-10

Query Match      100.0%; Score 1532; DB 4; Length 303;
Best Local Similarity 100.0%; Pred. No. 1.1e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 60
Db 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 71
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 131
Qy 121 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 180
Db 132 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 191
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 240
Db 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 251
Qy 241 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 252 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303

RESULT 3
US-10-017-736C-4
; Sequence 4, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-4

Query Match      100.0%; Score 1532; DB 4; Length 334;
Best Local Similarity 100.0%; Pred. No. 1.1e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 60
Db 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 71
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 131
Qy 121 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 180
Db 132 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 191
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 240
Db 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 251
Qy 241 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 252 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303

US-10-017-736C-14
; Sequence 14, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736C-14

Query Match      100.0%; Score 1532; DB 4; Length 341;
Best Local Similarity 100.0%; Pred. No. 1.3e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 60
Db 50 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLDQWAHAGLRDLAVAVEPV 109
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 120
Db 110 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNPEGQGWRLAPITAYSQ 169
Qy 121 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 180
Db 170 QTRGLLGCIITSLTGRDNQVEGEVQVVSSTATQSFATCVNGVCWTTFHAGSGKTLGAPK 229
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 240
Db 230 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLS 289
Qy 241 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 290 PRPVSYLKGSGGGLLCPSGHVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341
```

```
RESULT 5
US-10-017-736C-13
; Sequence 13, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamare, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-13

Query Match      100.0%; Score 1532; DB 4; Length 352;
Best Local Similarity 100.0%; Pred. No. 1.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AOGLIRACMLVRKAAGGHVQMAFMKLAALTGTVYVDHLTPLODWAHAGRLDLA VEPV 60
DB 61 AOGLIRACMLVRKAAGGHVQMAFMKLAALTGTVYVDHLTPLODWAHAGRLDLA VEPV 120
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQ 120
DB 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQ 180
QY 121 QTRGLLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 180
DB 181 QTRGLLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 240
QY 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 240
DB 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 300
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 301 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352
```

```
RESULT 6
US-10-017-736C-12
; Sequence 12, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamare, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-12
```

```
Query Match      100.0%; Score 1532; DB 4; Length 380;
Best Local Similarity 100.0%; Pred. No. 1.5e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AOGLIRACMLVRKAAGGHVQMAFMKLAALTGTVYVDHLTPLODWAHAGRLDLA VEPV 60
DB 89 AOGLIRACMLVRKAAGGHVQMAFMKLAALTGTVYVDHLTPLODWAHAGRLDLA VEPV 148
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQ 120
DB 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQ 208
QY 121 QTRGLLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 180
DB 209 QTRGLLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 268
QY 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 240
DB 269 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 328
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 329 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 7
US-10-017-736C-11
; Sequence 11, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamare, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-11
```

```
Query Match      100.0%; Score 1532; DB 4; Length 393;
Best Local Similarity 100.0%; Pred. No. 1.6e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AOGLIRACMLVRKAAGGHVQMAFMKLAALTGTVYVDHLTPLODWAHAGRLDLA VEPV 60
DB 102 AOGLIRACMLVRKAAGGHVQMAFMKLAALTGTVYVDHLTPLODWAHAGRLDLA VEPV 161
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQ 120
DB 162 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAPITAYSQ 221
QY 121 QTRGLLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 180
DB 222 QTRGLLGCIITSLTGRDKNQVEGEVQVSTATQSFATCNGVCWTVFHGAGSKTLGAPK 281
QY 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 240
DB 282 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVI PVRRRGDSRGSLLS 341
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 342 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393
```

```

RESULT 8
US-10-017-736C-2
; Sequence 2, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 409
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-2

Query Match      100.0%; Score 1532; DB 4; Length 409;
Best Local Similarity 100.0%; Pred. No. 1.7e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTPLODWAHAGLRDLAVAVEPV 60
DB 106 AQLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTPLODWAHAGLRDLAVAVEPV 165
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120
DB 166 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 225
QY 121 QTRGLLGCIITSITGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPK 180
DB 226 QTRGLLGCIITSITGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPK 285
QY 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
DB 286 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 345
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 346 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

```

```

RESULT 9
US-10-017-736C-18
; Sequence 18, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-18

```

```

Query Match      99.4%; Score 1523; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 8.9e-145;
Matches 291; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTPLODWAHAGLRDLAVAVEPV 60
DB 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTPLODWAHAGLRDLAVAVEPV 71
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120
DB 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 131
QY 121 QTRGLLGCIITSITGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPK 180
DB 132 QTRGLLGCIITSITGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPK 191
QY 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
DB 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 251
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 252 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303

```

```

RESULT 10
US-10-017-736C-16
; Sequence 16, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarre, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-16

```

```

Query Match      99.3%; Score 1522; DB 4; Length 303;
Best Local Similarity 99.7%; Pred. No. 1.1e-144;
Matches 291; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTPLODWAHAGLRDLAVAVEPV 60
DB 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGYVVDHLTPLODWAHAGLRDLAVAVEPV 71
QY 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120
DB 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 131
QY 121 QTRGLLGCIITSITGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPK 180
DB 132 QTRGLLGCIITSITGRDKNOVEGEVQVSTATOSFLATCNGVCWTVFHGAGSKTLGPK 191
QY 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 240
DB 192 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRRGRSGSLLS 251
QY 241 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
DB 252 PRPVSYLKGSSGGPLLCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 303

```


RESULT 11
US-10-017-736C-17
; Sequence 17, Application US/10017736C
; Patent No. 6815159
; GENERAL INFORMATION:
; APPLICANT: Thibeault, Diane
; APPLICANT: Lamarie, Daniel
; APPLICANT: Maurice, Roger
; APPLICANT: Pilote, Louise
; APPLICANT: Pause, Armin
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017.736C
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 301
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736C-17

Query Match 98.8%; Score 1513; DB 4; Length 301;
Best Local Similarity 99.3%; Pred. No. 8.9e-144;
Matches 290; Conservative 0; Mismatches 0; Indels 2; Gaps 1;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGLRDLAVAVEPV 60
Db 12 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGLRDLAVAVEPV 71

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRL--PITAYSQ 129

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVFGAGSKTLGAPK 180
Db 130 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVFGAGSKTLGAPK 189

Qy 181 GPITOMYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRGDSRGSLLS 240
Db 190 GPITOMYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRGDSRGSLLS 249

Qy 241 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 250 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 301

RESULT 12
US-09-263-933-4
; Sequence 4, Application US/09263933
; Patent No. 6280940
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09-03-08
; CURRENT FILING DATE: 1999-03-08
; EARLIER APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
US-09-263-933-4

Query Match 96.1%; Score 1473; DB 3; Length 1692;
Best Local Similarity 94.5%; Pred. No. 1.1e-138;
Matches 276; Conservative 10; Mismatches 6; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGLRDLAVAVEPV 60
Db 194 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGLRDLAVAVEPV 253

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120
Db 254 VFSDMETKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 313

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVFGAGSKTLGAPK 180
Db 314 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVFGAGSKTLGAPK 373

Qy 181 GPITOMYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRGDSRGSLLS 240
Db 374 GPITOMYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRGDSRGSLLS 433

Qy 241 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 434 PRPVSYLKGSGGGLLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 13
US-09-919-901-4
; Sequence 4, Application US/09919901
; Patent No. 6599738
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/09/919,901
; CURRENT FILING DATE: 2001-08-02
; PRIOR APPLICATION NUMBER: 09/263,933
; PRIOR FILING DATE: 1999-02-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: :
US-09-919-901-4

Query Match 96.1%; Score 1473; DB 4; Length 1692;
Best Local Similarity 94.5%; Pred. No. 1.1e-138;
Matches 276; Conservative 10; Mismatches 6; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGLRDLAVAVEPV 60
Db 194 AQLIRACMLVRKAAGHYVQMAFMKLAALTGTYYVYDHLTPLODWAHAGLRDLAVAVEPV 253

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 120
Db 254 VFSDMETKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLAPITAYSQ 313

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVFGAGSKTLGAPK 180
Db 314 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVFGAGSKTLGAPK 373

Qy 181 GPITOMYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRGDSRGSLLS 240
Db 374 GPITOMYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLVLTVRHADVIPIVRRGDSRGSLLS 433

```
Qy 241 PRPVSYLKSGSGPGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 434 PRPVSYLKSGSGPGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 14
US-10-191-966-4
; Sequence 4, Application US/10191966
; Patent No. 6790612
; GENERAL INFORMATION:
; APPLICANT: Potts, Karen E.
; APPLICANT: Jackson, Roberta L.
; APPLICANT: Patrick, Amy K.
; TITLE OF INVENTION: REPORTER GENE SYSTEM FOR USE IN CELL-BASED ASSESSMENT
; TITLE OF INVENTION: OF INHIBITORS OF THE HEPATITIS C VIRUS PROTEASE
; FILE REFERENCE: 0125-0005A
; CURRENT APPLICATION NUMBER: US/10/191,966
; CURRENT FILING DATE: 2002-07-10
; PRIOR APPLICATION NUMBER: US/09/263,933
; PRIOR FILING DATE: 1999-03-08
; PRIOR APPLICATION NUMBER: 09/129,611
; PRIOR FILING DATE: 1998-08-05
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1692
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION:
US-10-191-966-4

Query Match 96.1%; Score 1473; DB 4; Length 1692;
Best Local Similarity 94.5%; Pred. No. 1.1e-138;
Matches 276; Conservative 10; Mismatches 6; Indels 0; Gaps 0;

Qy 1 AOGILRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 60
Db 194 AOGILHACMLVRKVAGGHYVQMAFMKLGALTGTYYIYNHLTPLRDWAHAGLRDLAVAVEPV 253
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPDNFEQGWRLAPITAYSQ 120
Db 254 VFSDMETKIITWGADTAACGDIILGLPVSARRGREIILGPDADSLGGRWRLAPITAYSQ 313
Qy 121 QTRGLLGCIIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 180
Db 314 QTRGLLGCIIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 373
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 374 GPITQMTYTNVDQDLVGWQAPPGARSLTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 433
Qy 241 PRPVSYLKSGSGPGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 434 PRPVSYLKSGSGPGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 485

RESULT 15
US-09-539-601-6
; Sequence 6, Application US/09539601C
; Patent No. 6630343
; GENERAL INFORMATION:
; APPLICANT: Bartenschlager, Ralf FW
; TITLE OF INVENTION: Hepatitis C Virus Cell Culture System
; FILE REFERENCE: all sequences
; CURRENT APPLICATION NUMBER: US/09/539,601C
; CURRENT FILING DATE: 2001-08-30
; EARLIER APPLICATION NUMBER: 199 15 178.4 GERMANY
; EARLIER FILING DATE: 1999-04-03
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 2201
```

```
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-539-601-6

Query Match 96.1%; Score 1473; DB 4; Length 2201;
Best Local Similarity 94.9%; Pred. No. 1.6e-138;
Matches 277; Conservative 8; Mismatches 7; Indels 0; Gaps 0;

Qy 1 AOGILRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTPLODWAHAGLRDLAVAVEPV 60
Db 106 AHGLIRACMLVRKVAGGHYVQMALMKLAALTGTYYVDHLTPLRDWAHAGLRDLAVAVEPV 165
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPDNFEQGWRLAPITAYSQ 120
Db 166 VFSDMETKIITWGADTAACGDIILGLPVSARRGREIILGPDADSLGGRWRLAPITAYSQ 225
Qy 121 QTRGLLGCIIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 180
Db 226 QTRGLLGCIIITSLTGRDKNQVEGEVQVVSSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 285
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 286 GPITQMTYTNVDQDLVGWQAPPGARSLTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 345
Qy 241 PRPVSYLKSGSGPGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 346 PRPVSYLKSGSGPGLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 397

Search completed: May 26, 2005, 22:03:44
Job time : 17.947 secs
```

Fri May 27 09:41:15 2005

us-10-650-585-15.rapb

Page 1

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 26, 2005, 21:58:09 ; Search time 50.8409 Seconds
(without alignments)
1981.317 Million cell updates/sec

Title: US-10-650-585-15

Perfect score: 1532

Sequence: 1 AQLIRACMLVRKAAGHYV.....RGVAKAVDFIPVSMETTM 292

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1462099 seqs, 344972447 residues

Total number of hits satisfying chosen parameters: 1462099

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1532	100.0	292	13	US-10-017-736-15
2	1532	100.0	292	15	US-10-650-585-15
3	1532	100.0	303	13	US-10-017-736-10
4	1532	100.0	303	15	US-10-650-585-10
5	1532	100.0	334	13	US-10-017-736-4
6	1532	100.0	334	15	US-10-650-585-4
7	1532	100.0	341	13	US-10-017-736-14
8	1532	100.0	341	15	US-10-650-585-14
9	1532	100.0	352	13	US-10-017-736-13
10	1532	100.0	352	15	US-10-650-585-13
11	1532	100.0	380	13	US-10-017-736-12
12	1532	100.0	380	15	US-10-650-585-12
13	1532	100.0	393	13	US-10-017-736-11

14	1532	100.0	393	15	US-10-650-585-11	Sequence 11, Appl
15	1532	100.0	409	13	US-10-017-736-2	Sequence 2, Appl
16	1532	100.0	409	15	US-10-650-585-2	Sequence 2, Appl
17	1523	99.4	303	13	US-10-017-736-18	Sequence 18, Appl
18	1523	99.4	303	15	US-10-650-585-18	Sequence 18, Appl
19	1522	99.3	303	13	US-10-017-736-16	Sequence 16, Appl
20	1522	99.3	303	15	US-10-650-585-16	Sequence 16, Appl
21	1513	98.8	301	13	US-10-017-736-17	Sequence 17, Appl
22	1513	98.8	301	15	US-10-650-585-17	Sequence 17, Appl
23	1476	96.3	3010	16	US-10-333-449A-34	Sequence 34, Appl
24	1473	96.1	1692	10	US-09-919-901-4	Sequence 4, Appl
25	1473	96.1	1692	14	US-10-191-966-4	Sequence 4, Appl
26	1473	96.1	2201	13	US-10-029-907-3	Sequence 3, Appl
27	1473	96.1	2201	14	US-10-309-561-3	Sequence 3, Appl
28	1473	96.1	2201	16	US-10-789-355-3	Sequence 3, Appl
29	1473	96.1	2307	10	US-09-919-901-2	Sequence 2, Appl
30	1473	96.1	2307	14	US-10-191-966-2	Sequence 2, Appl
31	1473	96.1	3010	15	US-10-467-000-1	Sequence 1, Appl
32	1470	96.0	1692	10	US-09-919-901-11	Sequence 11, Appl
33	1470	96.0	1692	14	US-10-191-966-11	Sequence 11, Appl
34	1470	96.0	2307	10	US-09-919-901-9	Sequence 9, Appl
35	1470	96.0	2307	14	US-10-191-966-9	Sequence 9, Appl
36	1461	95.4	1692	10	US-09-919-901-18	Sequence 18, Appl
37	1461	95.4	1692	14	US-10-191-966-18	Sequence 18, Appl
38	1461	95.4	2307	10	US-09-919-901-16	Sequence 16, Appl
39	1461	95.4	2307	14	US-10-191-966-16	Sequence 16, Appl
40	1424	93.0	2201	13	US-10-085-476-2	Sequence 2, Appl
41	1362	88.9	3011	9	US-09-742-659-4	Sequence 4, Appl
42	1362	88.9	3011	10	US-09-891-894-3	Sequence 3, Appl
43	1362	88.9	3011	14	US-10-184-150-3	Sequence 3, Appl
44	1362	88.9	3011	15	US-10-328-997-3	Sequence 3, Appl
45	1362	88.9	3012	9	US-09-238-076-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1

US-10-017-736-15
; Sequence 15, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 292
; TYPE: PRT
; ORGANISM: HCV
; US-10-017-736-15

Query Match	100.0%;	Score	1532;	DB	13;	Length	292;
Best Local Similarity	100.0%;	Pred. No.	7e-145;				
Matches	292;	Conservative	0;	Mismatches	0;	Indels	0;
Gaps	0;						
Qy	1	AQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV	60				
Db	1	AQGLIRACMLVRKAAGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGLRDLAVAVEPV	60				
Qy	61	IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAITYSQ	120				
Db	61	IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNFEQGWRLLAITYSQ	120				
Qy	121	QTRGLLCIITSITGRDKNQVEGEVQVSTATQSFATCNGVCTVPHGAGSKTLAPK	180				
Db	121	QTRGLLCIITSITGRDKNQVEGEVQVSTATQSFATCNGVCTVPHGAGSKTLAPK	180				

Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
Db 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240

Qy 241 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 292
|
Db 241 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 292

RESULT 2

US-10-650-585-15
; Sequence 15, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 292
; TYPE: PRT
; ORGANISM: HCV
; US-10-650-585-15

Query Match 100.0%; Score 1532; DB 15; Length 292;
Best Local Similarity 100.0%; Pred. No. 7e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTFLQDWAHAGLRDLAVAVEPV 60
|
Db 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTFLQDWAHAGLRDLAVAVEPV 60

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 120
|
Db 61 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 120

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 180
|
Db 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 180

Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
Db 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240

Qy 241 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 292
|
Db 241 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 292

RESULT 3

US-10-017-736-10
; Sequence 10, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT

; ORGANISM: HCV
US-10-017-736-10

Query Match 100.0%; Score 1532; DB 13; Length 303;
Best Local Similarity 100.0%; Pred. No. 7.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTFLQDWAHAGLRDLAVAVEPV 60
|
Db 12 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTFLQDWAHAGLRDLAVAVEPV 71

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 120
|
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 131

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 180
|
Db 132 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 191

Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
Db 192 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 251

Qy 241 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 292
|
Db 252 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 303

RESULT 4

US-10-650-585-10
; Sequence 10, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR FILING DATE: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 303
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-10

Query Match 100.0%; Score 1532; DB 15; Length 303;
Best Local Similarity 100.0%; Pred. No. 7.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTFLQDWAHAGLRDLAVAVEPV 60
|
Db 12 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYVDHLTFLQDWAHAGLRDLAVAVEPV 71

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 120
|
Db 72 IFSDMEVKIITWGADTAACGDIISGLPVSAARRGREILLGPADNPEGQGWRLAPITAYSQ 131

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 180
|
Db 132 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVFHGAGSKTLAGPK 191

Qy 181 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
|
Db 192 GPITQMTYTNVDQDLVGMQAPPGARSMPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 251

Qy 241 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 292
|
Db 252 PRPVSYLKGSGGPGLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETTMR 303

```

2
RESULT 5
US-10-017-736-4
; Sequence 4, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-4

Query Match      100.0%; Score 1532; DB 13; Length 334;
Best Local Similarity 100.0%; Pred. No. 8.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGLRDLAVAVEPV 60
Db 27 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGLRDLAVAVEPV 86

Qy 61 IFSDMEVKIITWGADTTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 120
Db 87 IFSDMEVKIITWGADTTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 146

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVPFHGAGSKTLAGPK 180
Db 147 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVPFHGAGSKTLAGPK 206

Qy 181 GPITQMTNVDDQLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 207 GPITQMTNVDDQLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 266

Qy 241 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETNMR 292
Db 267 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETNMR 318

RESULT 6
US-10-650-585-4
; Sequence 4, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 334
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-4

Query Match      100.0%; Score 1532; DB 15; Length 334;
Best Local Similarity 100.0%; Pred. No. 8.4e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGLRDLAVAVEPV 60
Db 27 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGLRDLAVAVEPV 86

Qy 61 IFSDMEVKIITWGADTTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 120
Db 87 IFSDMEVKIITWGADTTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 146

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVPFHGAGSKTLAGPK 180
Db 147 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVPFHGAGSKTLAGPK 206

Qy 181 GPITQMTNVDDQLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 207 GPITQMTNVDDQLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 266

Qy 241 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETNMR 292
Db 267 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETNMR 318

RESULT 7
US-10-017-736-14
; Sequence 14, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-14

Query Match      100.0%; Score 1532; DB 13; Length 341;
Best Local Similarity 100.0%; Pred. No. 8.6e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGLRDLAVAVEPV 60
Db 50 AAGLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLQDWAHAGLRDLAVAVEPV 109

Qy 61 IFSDMEVKIITWGADTTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 120
Db 110 IFSDMEVKIITWGADTTAACGDIISGLPVSARRGREIILGPADNFEQGQWRLAPITAYSQ 169

Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVPFHGAGSKTLAGPK 180
Db 170 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCWTVPFHGAGSKTLAGPK 229

Qy 181 GPITQMTNVDDQLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 230 GPITQMTNVDDQLVGMQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 289

Qy 241 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETNMR 292
Db 290 PRPVSYLKGSSGGPLLCPSGHAGVIFRAAVCTRGVAKAVDFIPVESMETNMR 341

RESULT 8
US-10-650-585-14
; Sequence 14, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
```

```
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 341
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-14

Query Match      100.0%; Score 1532; DB 15; Length 341;
Best Local Similarity 100.0%; Pred. No. 8.6e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAPV 60
Db 50 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAPV 109
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 120
Db 110 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 169
Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 180
Db 170 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 229
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 230 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 289
Qy 241 PRPVSYLKGSSGGPFLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 290 PRPVSYLKGSSGGPFLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 341

RESULT 9
US-10-017-736-13
; Sequence 13, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-13

Query Match      100.0%; Score 1532; DB 13; Length 352;
Best Local Similarity 100.0%; Pred. No. 9e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAPV 60
Db 61 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAPV 120
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 120
Db 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 180
Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 180
Db 181 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 240
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Qy 241 PRPVSYLKGSSGGPFLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 301 PRPVSYLKGSSGGPFLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352

RESULT 10
US-10-650-585-13
; Sequence 13, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 352
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-13

Query Match      100.0%; Score 1532; DB 15; Length 352;
Best Local Similarity 100.0%; Pred. No. 9e-145;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAPV 60
Db 61 AQLIRACMLVRKAAGGHYVQMAFMKLAALTGTYYDHLTPLODWAHAGRLDLAVAPV 120
Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 120
Db 121 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREIILGPADNFEQGWRLLAPITAYSQ 180
Qy 121 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 180
Db 181 QTRGLGCIITSLTGRDKNQVEGEVQVSTATQSFATCVNGVCTVPHGAGSKTLAGPK 240
Qy 181 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 240
Db 241 GPITQMTYTNVDQDLVGWQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGSLLS 300
Qy 241 PRPVSYLKGSSGGPFLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 301 PRPVSYLKGSSGGPFLCPGSHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 352

RESULT 11
US-10-017-736-12
; Sequence 12, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
```

```

; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-12

Query Match
Best Local Similarity 100.0%; Score 1532; DB 13; Length 380;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGRLDLAVAVPV 60
Db 89 AQLIRACMLVRKAAGGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGRLDLAVAVPV 148

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 120
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 208

Qy 121 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 180
Db 209 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 268

Qy 181 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGLLS 240
Db 269 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGLLS 328

Qy 241 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 329 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

```

```

RESULT 12
US-10-650-585-12
; Sequence 12, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 380
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-12

```

```

Query Match
Best Local Similarity 100.0%; Score 1532; DB 15; Length 380;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGRLDLAVAVPV 60
Db 89 AQLIRACMLVRKAAGGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGRLDLAVAVPV 148

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 120
Db 149 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 208

Qy 121 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 180
Db 209 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 268

Qy 181 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGLLS 240
Db 269 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGLLS 328

```

```

Qy 241 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 329 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 380

RESULT 13
US-10-017-736-11
; Sequence 11, Application US/10017736
; Publication No. US20020192640A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/017,736
; CURRENT FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-017-736-11

```

```

Query Match
Best Local Similarity 100.0%; Score 1532; DB 13; Length 393;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 AQLIRACMLVRKAAGGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGRLDLAVAVPV 60
Db 102 AQLIRACMLVRKAAGGHYVQMAFMKLAALGTYYVDHLTPLODWAHAGRLDLAVAVPV 161

Qy 61 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 120
Db 162 IFSDMEVKIITWGADTAACGDIISGLPVSARRGREILLGPADNPEGQGWRLAPITAYSQ 221

Qy 121 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 180
Db 222 QTRGLLCIITSLTGRDNQVGEVQVVSSTATQSFLATCVNGVCWTVFHGAGSKTLGPK 281

Qy 181 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGLLS 240
Db 282 GPITQMTYTNVDQDLVGVQAPPGARSMTPTCTCGSSDLYLVTRHADVIPIVRRGDSRGLLS 341

Qy 241 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 292
Db 342 PRPVSYLKGSSGGPCLPCPSGHAVGIFRAAVCTRGVAKAVDFIPVESMETTMR 393

```

```

RESULT 14
US-10-650-585-11
; Sequence 11, Application US/10650585
; Publication No. US20040077066A1
; GENERAL INFORMATION:
; APPLICANT: Boehringer Ingelheim (Canada) Ltd.
; TITLE OF INVENTION: Purified Active HCV NS2/3 Protease
; FILE REFERENCE: 13/082
; CURRENT APPLICATION NUMBER: US/10/650,585
; CURRENT FILING DATE: 2003-08-28
; PRIOR APPLICATION NUMBER: US/10/017,736A
; PRIOR FILING DATE: 2001-12-14
; PRIOR APPLICATION NUMBER: 60/256,031
; PRIOR FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 393
; TYPE: PRT
; ORGANISM: HCV
US-10-650-585-11

Query Match
Best Local Similarity 100.0%; Score 1532; DB 15; Length 393;
Matches 292; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

